

THE LIVING AGE.

No. 731.—29 May 1858.—Enlarged Series, No. 9.

CONTENTS.

	PAGE.
1. Public Speaking,	<i>Quarterly Review</i> , 643
2. Library of John Matthew Gutch,	<i>Athenæum</i> , 656
3. Annals of California,	<i>Edinburgh Review</i> , 657
4. Food and Drink—Part II.,	<i>Blackwood's Magazine</i> , 674
5. My Annular Eclipse,	<i>Household Words</i> , 686
6. Sir,	<i>Chambers's Journal</i> , 690
7. The Blue Dye Plant,	<i>Household Words</i> , 692
8. A "Rarey" Show,	<i>Chambers's Journal</i> , 694
9. Lost Alice,	<i>Household Words</i> , 698
10. Science and Art for April,	<i>Chambers's Journal</i> , 706
11. The Slave-Trade in Turkey,	" " 709
12. Shaftesbury's Characteristics, a new edition— Being doubts upon the Sepoy Atrocities,	<i>Saturday Review</i> , 713
13. Nana Sahib,	<i>Chambers's Journal</i> , 718

POETRY.—A Night Scene, 642. Rejoice Evermore, 642. An Old Maid's Retrospections, 673. Punch's Song of the North Wind, 673. Home and Rest, 720. Hour of Prayer, 720. Buried To-day, 720. Dead Reckoning, 720. Sors Horatiana, 720.

SHORT ARTICLES.—Character of Talleyrand, 655. Family of Temperance, 655. A Child on the Eternal Fitness of Things, 655. King of Sardinia, 656. Photography applied to Medicine, 656. Cause and Treatment of Tuberculous Diseases, 672. Convulsions of Pregnancy, etc., 672. The Timely Retreat, 672. Unnatural Deaths, 685. Mahommed's Conversions, 689. Good Meaning Men, 689. Russian Serfs, 691. New Names of London Streets, 697. Women and Tortoisés, 705. Chase of the Ostrich, 712. Yankee Conceit, 717. Charter to the London University, 717. Doctor of Science, 717. Gospels in Greek, A.D. 480, 717. Short Stories, 717. Life and Times of Hugh Miller, 719.

PUBLISHED EVERY SATURDAY BY

LITTELL, SON & CO., Boston; and STANFORD & DELISSER, 508 Broadway, New-York.

For Six Dollars a year, remitted directly to either of the Publishers, the Living Age will be punctually forwarded, free of postage.

Complete sets of the First Series, in thirty-six volumes, and of the Second Series, in twenty volumes, handsomely bound, packed in neat boxes, and delivered in all the principal cities, free of expense of freight, are for sale at two dollars a volume.

ANY VOLUME may be had separately, at two dollars, bound, or a dollar and a half in numbers.

ANY NUMBER may be had for 12 cents; and it is well worth while for subscribers or purchasers to complete any broken volumes they may have, and thus greatly enhance their value.

From Harper's Monthly.

A NIGHT SCENE.

BY WILLIAM CULLEN BRYANT.

On River, gentle River, gliding on,
In silence, underneath this starless sky!
Thine is a ministry that never rests,
Even while the living slumber. For a time,
The meddler, man, hath left the elements
In peace; the ploughman breaks the clods no
more;

The miner labors not, with steel and fire,
To rend the rock; and he that hews the stone,
And he that fells the forest; he that guides
The loaded wain, and the poor animal
That drags it, have forgotten, for a while,
Their toils, and share the quiet of the earth.

Thou pausest not in thine allotted task,
Oh darkling River! through the night I hear
Thy wavelets rippling on the pebbly beach;
I hear thy current stir the rustling sedge
That skirts thy bed; though intermitted not
Thine everlasting journey, drawing on
A silvery train from many a mountain brook
And woodland spring. The dweller by thy side,
Who moored his little boat upon thy beach,
Though all the waters that upbore it then
Have slid away o'er night, shall find, at morn,
Thy channel filled with waters freshly drawn
From distant cliffs, and hollows where the rill
Comes up amid the water-falls. All night
Thou givest moisture to the thirsty roots
Of the lithe willow and o'erhanging plane,
And cherishest the herbage on thy bank,
Speckled with little flowers; and sendest up,
Perpetually, the vapors from thy face
To steep the hills with dew, or darken heaven
With marching clouds that trail the abundant
showers.

Oh River, darkling River! what a voice
Is that thou utterest while all else is still!
The ancient voice that, centuries ago,
Sounded between thy hills while Rome was yet
A weedy solitude by Tiber's stream!
How many, at this hour, along thy course,
Slumber to thine eternal murmurings,
That mingle with the utterance of their dreams!
At dead of night the child awakes and hears
Thy soft, familiar dashings, and is soothed,
And sleeps again. An airy multitude
Of little echoes, all unheard by day,
Faintly repeat, till morning, after thee,
The story of thine endless goings forth.

Yet there are those who lie beside thy bed,
For whom thou once didst rear the bowers that
screen

Thy margin, and didst water the green fields,
And now there is no night so still that they
Can hear thy lapse; their slumbers, were thy
voice

Louder than ocean's, it could never break.
For them the early violet no more
Opens upon thy bank, nor, for their eyes,
Glitter the crimson pictures of the clouds
Upon thy bosom, when the sun goes down.
Their memories are abroad—the memories

Of those who last were gathered to the earth—
Lingering within the homes in which they sat,
Hovering about the paths in which they trod,
Haunting them like a presence. Even now
They visit many a dreamer in the forms
They walked in, ere, at last, they wore the
shroud;

And eyes there are that will not close to dream,
For weeping and for thinking of the grave,
The new-made grave, and the pale one within.
These memories and these sorrows all shall fade
And pass away, and fresher memories
And newer sorrows come and dwell awhile
Beside thy border, and, in turn, depart.

On glide thy waters till at last they flow
Beneath the windows of the populous town,
And all night long give back the gleam of lamps,
And glimmer with the trains of light that stream
From halls where dancers whirl. A dimmer
ray

Touches thy surface from the silent room
In which they tend the sick, or gather round
The dying; and a slender, steady beam
Comes from the little chamber in the roof,
Where, with a feverous crimson on her cheek,
The solitary damsel, dying too.
Plies the quick needle till the stars grow pale.
There, close beside the haunts of revel, stand
The blank, unlighted windows, where the poor,
In darkness and in hunger, wake till morn.
There, drowsily, on the half-conscious ear
Of the dull watchman, pacing on the wharf,
Falls the soft ripple of thy waves that strike
On the moored bark; but guiltier listeners
Are near, the prowlers of the night, who steal
From shadowy nook to shadowy nook, and start
If other sounds than thine are in the air.

Oh glide away from those abodes, that bring
Pollution to thy channel and make foul
Thy once clear current. Summon thy quick
waves.

And dimpling eddies; linger not, but haste,
With all thy waters, haste thee to the deep,
There to be tossed by shifting winds, and rocked
By that mysterious force which lives within
The sea's immensity, and wields the weight
Of its abysses, swaying, to and fro,
The billowy mess, until the stain, at length,
Shall wholly pass away, and thou regain
The crystal brightness of thy mountain springs.

"REJOICE EVERMORE."

I ERR'D this day, O Lord, and am
Not worthy to be call'd thy son;
But if thy will be, heavenly Lamb,
That I rejoice, thy will be done.
Death I deserve; I'm yet in life:
Ill is my wage; thou pay'st me good;
These are my children, this my wife,
I feel the spring, I taste my food.
Thy love exceeds, then all my blame.
O, grant me, since thou grantest these,
Still to put "Hallow'd be thy name,"
Before "Forgive my trespasses."

—Fraser's Magazine.

C. P.

From The Quarterly Review.

1. *The Speeches of Lord Chatham, Sheridan, Erskine, and Fox; with Biographical Memoirs, and Introductions and Explanatory Notes.* Edited by a Barrister. 4th edition. 2 vols. imp. 8vo. London, 1855.
2. *Speeches on Social and Political Subjects, with Historical Introductions.* By Henry Lord Brougham, F.R.S., Member of the National Institute of France, and of the Royal Academy of Naples. 2 vols. post 8vo. London, 1857.
3. *An Inaugural Address delivered by Earl Stanhope at his Installation as Lord Rector of Marischal University, Aberdeen.* 8vo. London, 1858.

In an admirable address to the University of Aberdeen, Lord Stanhope has recently proved to the students, by numerous happy illustrations drawn from the lives of eminent men in the various departments of literature and science, that success is only to be obtained by industry. He repudiated the notion of heaven-born genius, if by that term is meant genius which spontaneously pours forth its stores without labor or study. The greatest talents, like the richest soil, only yields its choicest fruits to preserving tillage. If there is one branch of excellence which more than another has been supposed to be the gift of untutored nature, it is the faculty of verse; if there is one poet more than another who derived his inspiration from the innate passions of his heated mind, and who appeared to possess the body of embodying fervid feelings in glowing rhymes without the smallest effort, it was unquestionably Lord Byron. Yet in a conversation, quoted by Lord Stanhope, he asserted that it was nonsense to talk of extemporising verse. The prodigious quantity which he wrote during his short life is no less a proof of his diligence than of his fertility. Mr. Trelawny represents him as spending the larger part of his waking hours in meditating his works; and no physician or lawyer in extensive practice ever followed their professions with more dogged perseverance. His friend Moore, whose songs and tales have a far-fetched prettiness which indicates greater elaboration, confesses of himself that "he had been at all times a slower and more painstaking workman than would ever be guessed from the result." Pope tells us that in his boyhood

"he lisped in numbers, for the numbers came;" but if they came unsought, it was a felicity which forsook him as his understanding matured. Though by no means a voluminous writer, considering the many years he worked at his craft, Swift complained that he was never at leisure for conversation, because he "had always some poetical scheme in his head." He was in the habit of jotting down in the night, as he lay in bed, any striking thought or lucky expression which passed through his mind, lest it should be forgotten before morning. He recorded lines or fragments of lines, which he hoped to turn to account at a future period, and allowed not a crumb to fall to the ground. What he composed with care, he corrected with patience. He kept his pieces by him long before consigning them to the press; he read them to his friends, and invited their criticism; and his condensed couplets, which seem "finished more through happiness than pains," really owe their first quality to the last. As we ascend higher the same truth is equally apparent. Milton's studies are revealed in every page of the "Paradise Lost." One of the most original of poets in his conceptions and style, his particular phrases and allusions may be tracked in all the best literature both ancient and modern which existed before his day. He who invoked his muse to raise him to the "height of his great argument" did by that very expression intimate how vast an effort he considered to be necessary to treat worthily so sublime a theme, as in his *Lycidas* he had declared, "that to scorn delights and live laborious days" was the indispensable condition of fame. Of the habits of Shakespeare we know nothing, except the players boasted that he never blotted a line, which only proves that he must have matured his conceptions before committing them to paper. The knowledge of human nature is a matter of experience and not of intuition; and at least he must have been a diligent reader of men if he had been a careless reader of books. He must, however, have studied these not a little also, for his language in his poetical dialogue is not the language of conversation alone. Nor is there any poet whose effusions bear the impress of more severe thought, which not only impregnates, but some times obscures, his "thick-coming fancies." If internal evidence is to be a

guide, he, as little as any one, could have dispensed with previous meditation and preliminary discipline.

Wherever prose-writers have been remarkable for some particular quality, it will be equally found that the point in which they have excelled was one upon which they had bestowed commensurate pains. Those, for example, who are distinguished for the beauty of their style have acquired their skill as the artist acquires his power of drawing—not by contenting themselves with the first rude and rapid draught, but by repeated references to better models, by an incessant renewal of their attempts, and by the untiring correction of defects. Every one knows that Pascal wrote each of his "Provincial Letters" many times over. The draught of his "*Epoques de la Nature*" which Buffon sent to the press was the eleventh. The Benedictine editor of Bossuet's works, stated that his manuscripts were bleared over with such numerous interlineations that they were nearly illegible. Burke penned his political pamphlets three times at least before they were put into type, and then he required to have a large margin for his manifold corrections. Sterne was incessantly employed for six months in perfecting one very diminutive volume. "I mention this," says Paley, to whom we owe our knowledge of the fact, "for the sake of those who are not sufficiently apprised that in writing, as in many other things, ease is not the result of negligence, but the perfection of art." The proposition that uncommon excellence arises from the concurrence of great talents with great industry is supported by so many examples that they might be produced by the score. The extraordinary effect, indeed, of sustained application might almost seem to countenance the saying of Buffon, that "genius was patience." The idle may dream over the fancied possession of intuitive powers which they never display. Those who enter the arena and engage in the contest know that strength cannot be put forth without strenuous exertion, nor skill be manifested without assiduous practice.

Of all the attainments which Lord Stanhope, in his graceful and attractive speech, showed to depend upon cultivation, none more needed to be dwelt upon before a body of students than that of oratory. There is no accomplishment which even when possessed in a moderate degree, raises its posses-

sor to consideration with equal rapidity, none for which there is so constant a demand in the church, in the senate, or at the bar, and none, strange to say, which is so little studied by the majority of aspirants. Dr. King, in his "*Anecdotes of his Own Time*," which was written in 1760, complains that the want of a proper power of expression was a universal defect in the English nation. Many admirable scholars whom he had known could not speak with propriety in a common conversation, whereas among the French and Italians he had met with few learned men who did not talk with ease and elegance. The only three persons of his acquaintance among our own countrymen who expressed themselves in a manner which would have been pronounced excellent if everything they uttered had been committed to writing, were Bishop Atterbury, Dr. Gower,* and Dr. Johnson. That his pupils might acquire the art of speaking with correctness and facility, he used to recommend them to get by heart a page of some English classic every morning and the method was often attended with complete success. There is still the same disproportion as in his day between the extensive learning of the educated classes and their capability of imparting it. Great pains are taken at our schools and universities to obtain knowledge, but upon the mode of conveying it in a way which shall be pleasing and forcible, no pains are bestowed at all. It is as if years should be spent in collecting materials for the construction of a mighty edifice without any attempt to dispose them in an order which would secure beauty, strength, or convenience. Lord Chesterfield was for ever impressing upon his son the necessity, if he wished to be listened to, of acquiring an elegant style and a good delivery. He appealed to the instances within his own experience of the applause which followed those who possessed these advantages, and of the uselessness without them of the most solid acquirements. Lord Townshend, he said, who invariably spoke with sound argument and abundant knowledge, was heard with impatience and ridicule, because his diction was always vulgar and frequently ungrammatical, his cadences false, and his voice inharmonious; whereas the Duke of Argyle, whose matter was flimsy, and his reasoning the weakest ever addressed to an intelligent

* He was Provost of Worcester College, Oxford.

assembly, "charmed, warmed, and ravished his audience," by a noble air, a melodious voice, a just emphasis, and a polished style. Lord Cowper and Sir William Wyndham prevailed chiefly by the same means. By his own account, Lord Chesterfield himself afforded an illustration of the truth of his position when he introduced his bill into the House of Lords for reforming the Calendar. He knew little of the matter, and resolved to supply the deficiency by well-rounded periods, and a careful delivery. "This," he continues, "succeeded and ever will succeed; they thought I informed, because I pleased them; and many of them affirmed that I had made the whole very clear to them when, God knows, I had not even attempted it." Lord Macclesfield, who was a profound astronomer, followed, and with a perfect mastery of the subject, and with as much lucidity as the question permitted, furnished a real explanation of it, but, as his sentences were not so good as those of Lord Chesterfield, "the preference," says the latter, "was most unanimously though most unjustly given to me." Upon every occasion he had found, in like manner, that weight without lustre was lead.

The total inattention to this truth is not, therefore, a matter of inferior moment. Hundreds of ripe scholars are unable in consequence to bring their attainments to bear upon the understandings of those whom it is their business to inform. Unadorned sense, dry reasoning, a hard, flat, and colorless style make no impression except that of weariness. It is not only in Parliament and the pulpit that the faculty is required of rendering knowledge and argument attractive. Those who observe the effects upon the lower orders of bodily toil, must be sensible that their education, from the time they leave school, will never be conducted in any marked degree through the medium of books. Their chief instruction must be oral, and in many parishes the clergy have adopted the practice of giving secular lectures, which succeed or fail in exact proportion as the lecturer is a proficient in the art of speaking. Tawdry bombast and low humor will, indeed, excite the admiration of unrefined rustics as well as the higher products of the intellect, but no learning, however abundant, ever commands the ears of these audiences, unless it is set off by some extrinsic charm. A gulf is left between

the mind of the speaker and that of the hearer, and until this strait can be bridged the long antecedent journey is more than half in vain. Nor need there be any fear that, if elocution and style were more cultivated, a torrent of tedious declamation would be let loose upon the world. Study, by improving taste, increases fastidiousness; and is rather calculated to check than to encourage an ill-timed loquacity. Clergymen and lawyers, at all events, are obliged by their calling to address public assemblies; and the sole question which remains to them is, whether they will do it well or ill.

The vulgar, said Lord Chesterfield, look upon a fine speaker as a supernatural being, and endowed with some peculiar gift of heaven. He himself maintained that a good speaker was as much a mechanic as a good shoemaker, and that the two trades were equally to be learned by the same amount of application. In this there was some degree of exaggeration, but he was much nearer the truth than those who are deterred from every attempt to improve by the erroneous idea that unless the power is intuitive it can never be acquired. They might consider by what long repeated efforts a child learns to talk and read, or the years they pored over Greek and Latin before they gained a mastery over these tongues, and they would not infer, because they felt no inherent aptitude for speaking, that, therefore, nature had denied them the capacity. So much is it a matter of industry that, if any schoolboy were asked to select the most conspicuous example of defects subdued and excellence attained by indefatigable perseverance, he would certainly name the first of orators. The most eloquent of Romans went through a training as severe as that of the illustrious Greek, and if Demosthenes and Cicero found elaborate preparation essential to success, it is no wonder that lesser men should not be speakers before they have studied how to speak. Lord Chesterfield declares that he succeeded in Parliament simply by resolving to succeed. He early saw the importance of eloquence, and neglected nothing which could assist him to become a proficient in it. He conned carefully all the fine passages he met with in his reading; he translated from various languages into English; he attended to his style in the freest conversations and most familiar letters; he never allowed a word to fall from his lips

which was not the best he could command! By these means he arrived at such an habitual accuracy that at last he said the pains would have been necessary to express himself inelegantly. A rapid review of the small band of pre-eminent speakers who have adorned our Senate, which has been the chief school of eloquence, the bar producing far fewer orators than might have been expected, will lead to the conclusion, that however varied in detail may have been the methods by which men learned to clothe ready conceptions in ready language, laborious study has been common to them all. From Demosthenes downwards no one has become an adept in the art without a special adaptation of means to the end. Nothing more is wanting to enable the enlightened part of the community to bring their minds into closer contact with the uninstructed, and thus to elevate the lower orders by a potent influence which hitherto has been imperfectly exerted, than that they should have the self-confidence to believe that the education which formed the Chesterfields will not be thrown away upon themselves. Nature has not destined every one to be a Chatham or a Burke, but there are few persons of fair abilities who might not attain to the power of expressing good sense, and useful knowledge, in clear, flowing, and agreeable language.

The old oratory, unlike the old literature of England, is effete and out of date. It was pedantic in the reigns of Elizabeth and James. In the great Rebellion, when the passions were roused to the utmost pitch, and it was employed to move the multitude as well as the senate, it might have been expected to assume a more modern and popular air. But the theological studies of the parliamentary leaders gave the law to their eloquence. They framed their speeches upon the model of sermons, divided them into heads, and deadened inflammatory sentiments by a didactic style. The famous orations of Mr. Pym are read in our day with such intolerable weariness, that we wonder they could ever have been listened to with patience by any assembly, ignorant or educated. They are able no doubt, but cumbersome and dreary, and never before or since did enthusiasm find vent in such inanimate language. Though Lord Strafford spoke at his trial with genuine eloquence, it is almost a solitary specimen, and nobody dreams of reverting to the de-

bates of that exciting time for grand sentiments expressed in burning words, or for maxims stamped in the mint which gives a perpetual currency to ideas. The style of speaking changed at the Restoration. The cavaliers were men of the world, who talked the language of the world. They flung aside that heavy scholastic garb which stifled sentiments instead of adorning them, and made a closer approximation to simplicity and nature. In the reign of Queen Anne parliamentary eloquence took much the same shape that it retains at present, as we can infer from casual specimens, and the descriptions of men in the next generation who had listened to it in their youth. Very little, however, has been preserved, and nearly the whole of that little is garbled and abridged. An imperfect abstract of the discussions in the Lords and Commons was commenced in 1711, in a publication called the "Political State of Great Britain;" but these epitomes merely aim at stating the opinions of the speakers, and make no pretence of preserving their language. Even of the opinions they were an untrustworthy indication, for they were compiled from the information of the door-keepers and subordinate officers of the Houses of Parliament. In 1736 Cave commenced a more elaborate system in the "Gentleman's Magazine." He employed persons to take notes by stealth, which were handed over to some author who used them as raw materials from which to manufacture finished speeches. Guthrie discharged the task till November, 1740, when it passed into the more powerful hands of Johnson. He relinquished it in February, 1743, and was succeeded by Hawkesworth, who carried on the process for near twenty years. Whatever the debates may have gained by this method in importance, they lost in accuracy. The memoranda were merely used as heads upon which to enlarge, and we must look in the printed reports for the characteristics of Guthrie, Johnson, and Hawkesworth, and not of Pulteney, Pitt, and Chesterfield.

The reason why Cave employed authors to compose debates instead of short-hand writers to report them, was the refusal of the legislature to permit the public to be a party to its proceedings. No notes could be taken openly, and Cave was quickly warned by the Speaker of the House of Commons to desist from printing the discussions at all. He

evaded the injunction by inserting them under fictitious names, and by various devices contrived to furnish his readers with a key. The interest which was felt in this portion of his magazine showed that the curiosity of the country was awakened. The debaters on their part were many of them eager for a larger audience, and speeches were often conveyed underhand to Cave by the authors themselves. The growing desire of those without to hear, and of those within to be heard, at last threw open the doors of both houses; the style of reporting became more and more exact, and though it was long in attaining to the habitual completeness which prevails at present, many of the greater efforts of the principal speakers were recorded towards the close of the last century with perfect precision.

The orators of the unreported parliaments were at very little disadvantage. The reputation of a debater is made much more by his hearers than by his readers. The politician who spells the newspaper over his breakfast reaches the conclusion of passages which drew forth "loud cheers" without experiencing the slightest emotion, and sarcasms which elicited "loud laughter" without being lured into the faintest smile. There are instances at this moment, as there always have been instances, of persons who are held in considerable estimation in both Houses, who have scarce any name with the country, and those who only know the efforts even of the most celebrated speakers through the medium of the printing-press are apt to wonder at their fame. If this is the case among contemporaries to whom the topics are matter of absorbing interest, how much more must the orator lose with posterity when his subjects are obsolete, and appear as cold and repelling as the ashes of a fire which has burnt out. Notwithstanding that Pitt desired to have a speech of Lord Bolingbroke in preference to the most precious lost works of the ancients, we venture to think that after it had been glanced at from curiosity, it would be flung aside from disappointment. Lord Chesterfield, who had been among his auditors, applauds the "force and charm of his eloquence," and says that, "like Belial in Milton, 'he made the worse appear the better cause,'" but then the same authority bestows still stronger praise upon his writings, where we can form an estimate of the degree

of justice in the panegyric. He considers that Cicero alone could compete with him in composition; and he asserts of the "Letters on Patriotism" that they are adorned with all the beauties of oratory, and that until he read them he "did not know the extent and powers of the English language."

Burke, in the preface to his earliest work, the "Vindication of Natural Society," in which he imitated the style of Lord Bolingbroke, and ironically maintained his principles for the purpose of exposing them, is little less complimentary, and allows that his books were "justly admired for the rich variety of their imagery and the rapid torrent of an impetuous and overbearing eloquence."* It may be doubted whether Burke would have repeated this eulogy in maturer years, when he called him "a presumptuous and superficial writer," and said "that his works had not left any permanent impression on his mind." Nothing at any rate can be less rapid and impetuous than the manner of Lord Bolingbroke, which is in a singular degree slow and fatiguing, nor does any one revert to him now as "a model of eloquence" from which to learn the extent of the English tongue. He tediously unfolds his thinly scattered ideas in a long array of sounding sentences, and, though the diction is pure and harmonious, it is neither pointed nor brilliant. His treatises have been consigned to a practical oblivion, because they are found to be nearly unreadable, and what Lord Chesterfield considered "the most splendid eloquence," appears in our age to be very little better than empty rhetoric. Since his speeches greatly resembled the productions of his pen, and were not considered to be the least superior by an admirable judge who was familiar with both, we may conclude that their preservation would have contributed little to our pleasure, and added nothing to the reputation of Bolingbroke. Whatever were his merits, he is an example on the side of Lord Stanhope's doctrine, for he told Lord Chesterfield that the whole secret of his style was the constant attention he paid to it in his youth. Declama-

* Lord Chatham was another great admirer of Lord Bolingbroke, and said that his "Remarks on the History of England" should "almost be got by heart for the inimitable beauty of the style." Lord Grenville, in commenting upon this opinion, states the common judgment of our day, when he asserts that the style of the "Remarks" is "declamatory, diffusive, and involved, and deficient both in elegance and precision."

tion less polished than his, language less copious, and metaphors less appropriate, when set forth by a fine figure, voice, and elocution, would be highly imposing in delivery, and would call forth rapturous cheers. But his was the eloquence which is born of the occasion, and dies with the occasion, and this is the ordinary rule. There is not one of the great debaters who reached their zenith in the last century, with the exception of Burke, whose grandest displays appear to the reader of our day to warrant their renown. The politician may revert to the harrangues of Pitt, Sheridan, and Fox. The speeches of Burke alone have become incorporated with the literature of our country. There is a system of compensation in fame as in greater things. If the oratory of each generation is neglected by succeeding times, there is no species of intellectual excellence which produces such an immediate return. While the speaker is in the very act of forming his sentences his triumph is reflected from the countenances of the auditors, and is sounded from their lips. He proceeds, animated at every step by the full chorus of applause, which only comes to other men in feeble echoes long delayed, and which are more often lost before they can reach the ear of him who is the subject of the praise.

The causes of the prodigious success of oratory spoken over oratory read are easy to be distinguished. When the contending forces are drawn out face to face in hostile array there is the excitement of a battle, and every blow which tells against the enemy is received with the same sort of exultation that soldiers feel when a well-aimed shot rips up the ranks of the adversary, or blows up the magazine. The effect under these circumstances of a damaging reply arises as much from the state of mind of the auditors, as from the vigor of the retort. It is because the powder lights upon a heated surface that an explosion is produced, though, unless the powder was itself inflammable, the result could not ensue, and therefore the dust which is thrown by minor speakers falls feeble and harmless. The mere presence of numbers aids the impression even where the assembly is not split into parties, and no especial interest has been roused in advance on the question discussed. The speech which would be listened to calmly by half a dozen people will stir a multitude, and an observation will

raise a laugh in public, which would not pass for a joke in private. But perhaps the most influential element of all is the delight which is derived from the real or apparently spontaneous production of appropriate thoughts in well-chosen language,—in the exhibition of the feat of pouring out off-hand elaborate composition, and a connected series of apt ideas. The art is so remote from the common practice of mankind, that however often repeated it always excites the pleasure which arises from the manifestation of unusual power. Every great orator writes passages which he commits to memory, but it is a part of his science to blend the extemporaneous and the prepared portions into an indistinguishable whole, and were he by his clumsiness to betray the joins he would destroy the charm. The readers of a debate are no longer under the spell of this seeming facility. The language does not flow living to them from the lips of the speaker, and they judge it exactly as they would estimate the same quantity of printed matter by whatever means produced. In many cases in addition the figure, the voice, the manner of the man contribute largely to give force and animation to his words. The famous saying of Demosthenes that action, which includes delivery was the first, second, and third great requisite of an orator is repeated and confirmed by Cicero, who calls it the principal accomplishment in speaking. He affirms that the highest excellence is nothing without it, and that with it mediocrity can often surpass the most gifted. In modern times pre-eminent powers have enabled few to dispense with it. The assertion that it sets off feeble matter is as true as ever. In every age there are speakers who owe nearly the whole of their success to their delivery.

Another predominant cause of the different impression which a speech produces in the closet from what it does when heard is to be found in the nature of the oratorical style. When Dr. Johnson furnished Boswell with materials for an address to a Committee of the House of Commons on an election petition he added, "This you must enlarge on. You must not argue there, as if you were arguing in the schools. You must say the same thing over and over again, in different words. If you say it but once, they miss it in a moment of inattention." The masters of eloquence have enforced the rule. Fox

advised Sir Samuel Romilly, when about to sum up the evidence in Lord Melville's trial, "not to be afraid of repeating observations which were material, since it were better that some of the audience should observe it than that any should not understand." Though he himself was censured for the practice, he declared it to be his conviction, from long experience, that the system was right. Pitt urged a similar defence for the amplification which was thought by some to be a defect in his style. "Every person," he said, "who addressed a public assembly, and was anxious to make an impression upon particular points, must either be copious upon those points or repeat them, and that he preferred copiousness to repetition." Lord Brougham gives his testimony on the same side. The orator, he remarks, often feels that he could add strength to his composition by compression, but his hearers would then be unable to keep pace with him, and he is compelled to sacrifice conciseness to clearness. The Greeks appeared to shun every species of prolixity, which Lord Brougham justly considers to be an indication that they condensed their harangues when they committed them to writing. Burke shared the conviction that not even an Athenian audience could have followed the orations of Demosthenes, if he had uttered them in the concentrated form in which they have come down to us, and Cicero objects to the Greeks that they sometimes carried brevity to the point of obscurity. The expansion which is a merit at the moment of delivery is turned to a defect when a speech is printed. What before was impressive seems now to be verbose, and the effect is diminished in much the same proportion that it was originally increased. It was for some such reason that Fox asserted that if a speech read well it was not a good speech.

Though the force and splendor of oratory is only limited by the powers of the human mind, and though some of its displays rival anything which exists under any other form, less intrinsic excellence is required upon the whole to secure fame than in the productions of the pen. The balance is made up by the difficulty of pouring forth composition off-hand, which shall at least impose or sparkle at the moment. This facility is therefore the first requisite of the speaker, and in whatever qualities he is deficient, a want of readiness must not be one of them. Essays written

and learnt by heart, however brilliant, have never of themselves procured much reputation for any debater in modern times. Until he has proved that he is equal to extempore efforts he is rather sneered at than applauded. The first Mr. Pitt, the earliest, since the time of Queen Anne, of the great orators of whom we have specimens sufficient to enable us to judge of his style, had been at small pains to qualify himself for his part in other particulars, but a perennial flow of parliamentary eloquence can no more exist without prompt language than without a tongue, and he had taken especial care to furnish his memory with a copious vocabulary. Lord Chesterfield asserts that he had very little political knowledge, that his matter was generally flimsy, and his arguments often weak. This is confirmed by Dr. King, who states that he was devoid of learning, unless it was a slight acquaintance with the Latin classics, and his sister, Mrs. Anne Pitt, used to declare sarcastically—for being of the same haughty temperament they agreed, as Horace Walpole says, like two drops of fire—that the only book he had read was Spenser's "Fairy Queen," which drew from Burke the remark that whoever was master of Spenser "had a strong hold of the English language." But he had not trusted to the bright and romantic fancy of Spenser alone to supply him with the materials for contests so unlike the source from whence he fetched his aid. He studied the famous divines of our church, and especially Barrow, with the same view. Not only did he attain to a readiness which never failed him, and in the consciousness of power delighted to avail himself of any opportunity to reply, but according to Lord Chesterfield every word he employed was the most expressive that could be used. What remains of his eloquence would not bear out this last eulogium, but the reports are meagre, and cannot be trusted for more than an occasional fragment of which the vigor proves the accuracy. Nevertheless it is certain from contemporary accounts that, like all men who speak much, and trust to the inspiration of the hour, he sometimes made bad speeches, and would often interpose between his brighter sallies long passages of commonplace rhetoric. A bold, brief, and pointed mode of expressing daring truths, sometimes by metaphor and sometimes by antithesis, is the characteristic of his most stirring appeals. He

put what he had to say into the strongest words the English tongue would afford, and, possessing a spirit as dauntless as his language the attempt to check him invariably drew from him an indignant and defiant repetition of the offence. Hence he was a terrible antagonist, who awed his opponents by the fierceness and courage of his invectives, and on popular questions roused enthusiasm by the short and vehement sentences in which he embodied the feverish passions of his hearers. It required the utmost energy of style to sustain the commanding tone he assumed, and he would have been ridiculous if he had not been sublime. Of his manner we can with difficulty form an idea from the descriptions which have come down to us, but all are agreed that every art of elocution and action aided his imposing figure and his eagle eye. So consummate was his gesture and delivery that Horace Walpole often calls him "Old Garrick." This as much as his command of language must have been the result of study, and well deserved it for the effect which it produced.

In 1766 Johnson announced to Langton that Burke, who had recently obtained a seat in Parliament, "had made two speeches in the House for repealing the Stamp Act, which were publicly commended by Mr. Pitt, and had filled the town with wonder." This was the appropriate start of a man who, whether as a statesman, a thinker, or an orator, was without an equal. Pitt and Fox were great, but Burke belongs to another order of beings, and ranks with the Shakespeares, the Bacons, and the Newtons. He was what he called Charles Townshend—"a prodigy"—and the conclusion of Moore, after reading the debates of the time, that his speeches, when compared with those of his ablest contemporaries, were "almost superhuman," must be shared by every one who adopts the same means of forming a judgment. Johnson said "he did not grudge his being the first man in the House of Commons, for he was the first man everywhere" but the House of Commons was not composed of Johnsons, and when the novelty had worn off they grew tired of his magnificent harangues. His manner was against him. Grattan, who heard him shortly after he had entered Parliament, and while he was yet listened to "with profound attention," and received the homage due to "acknowledged superiority," states that there was a total want

of energy in his delivery, and of grace in his action. Later he was noted for frequent outbreaks of impetuosity bordering upon passion, but they rather conveyed the idea of irritability of temper than earnestness of feeling, and were thought no improvement upon the frigid tone of his early displays. His voice, which he never attempted to discipline, was harsh when he was calm, and when he was excited he often became so hoarse as to be hardly intelligible. But the main cause of the weariness he produced arose from his mode of treating his subject. Every man who has any opinions derived from deliberate investigation, unfolds them in the manner in which he himself arrived at them, and enforces the arguments which have carried conviction to his own understanding. Burke drew his conclusions from a wide survey of history and human nature—from enlarged principles, which looked far beyond the petty expedients and fitful passions of the hour. Upon this grand basis he founded his views of present policy. His hearers, on the contrary, were absorbed in the business of the moment, and were impatient of a process so circuitous, and so out of harmony with their own habits of thought. Whatever had not an immediate and obvious bearing upon the question before them seemed foreign to the matter, and carried the mind away from points on which it was fixed with eager interest to topics on which it felt no interest at all. His manner of expressing himself partook of the philosophic turn of his thoughts. However eloquent or imaginative, he never laid aside his didactic air; and not only tired his audience by his elaborate lessons in politics, but often seemed to them as if he was arrogating the authority of a master over his pupils. To such a degree was his method of expounding his ideas unsuited to the feelings which prevailed in the House of Commons, that Erskine crept under the benches to escape a speech which, when published, he thumbed to rags; and Pitt and Lord Grenville once consulted whether it was worth while to answer another of his famous harangues, and decided in the negative, though Lord Grenville read it afterwards with extreme admiration and delight, and held it to be one of his noblest efforts. The very circumstance which diminished the interest of his oratory when it was delivered adds to it now. The less it was confined to temporary topics, and the more it dealt in permanent principles, the

greater its value to posterity. Those whose own horizon was bounded by party prejudices could not even perceive how vast was the reach of his vision in comparison with their own. The profligate Wilkes, who, in his popular time, was at best an ape mimicking the fierceness of the tiger, said, in the days when the pretended patriot had subsided into the sleek and docile placeman, that Burke had drawn his own character in that of Rousseau—"much splendid, brilliant eloquence, little solid wisdom." In our age the wisdom and the eloquence would be pronounced to be upon a par. They are both transcendent, and the world has never afforded a second example of their union in anything like the same degree. His language was nervous, his sentences polished, his abundant metaphors grand and original. Though his style is never stilted, it has a rare majesty both in thought and expression. Occasionally he descends to phrases and images which are too homely for the general strain of his discourse; but these blots are not frequent. His commonest fault is rather a monotony of dignity, which wants the relief of passages dressed in a more familiar garb. He has the further defect of moving too slowly over his ground. There is no repetition in his language, nor much tautology in his sentences. But he dwells long upon one idea, and reiterates it as a whole or in its parts under manifold forms. That speeches so finished and elaborate, and abounding in eloquence of unrivalled magnificence, should have been the product of infinite pains, requires no other proof than is supplied by the speeches themselves. But the immense labor which he bestowed upon all he did was his constant boast. He disclaimed superior talent, and always appealed to his superior industry. Gibbon testifies that he published his great orations as he delivered them, which is only another mode of saying that he prepared his addresses to the House of Commons with no less care than he prepared his pamphlets for the printer. By this incessant labor he could at last soar at any moment to his highest elevation, as though it had been his natural level. "His very answers," says Horace Walpole, "that had sprung from what had fallen from others, were so pointed and artfully arranged that they wore the appearance of study." His innate genius was undoubtedly wonderful, but he improved it to the utmost. By reading and observation he fed his rich

imagination; to books he owed his vast and varied knowledge; from his extensive acquaintance with literature he derives his inexhaustible command of words; through his habits of severe thought he was enabled to draw the inferences which have won for him the renown of being the most sagacious of politicians; and by the incessant practice of composition he learnt to embody his conclusions in a style more grandly beautiful than has ever been reached by any other Englishman with either the tongue or the pen.

Conversation Sharpe relates of Mr. Fox that he sometimes put the arguments of his adversaries in such an advantageous light that his friends were alarmed lest he should fail to answer them. To state one by one the arguments of the opposition, and one by one to reply to them, was the characteristic of his speaking, and without the aid of this text upon which to hang his comments he could make little progress. His opening speeches were almost always bad. Until he got warmed with his subject he hesitated and stammered, and he often continued for long together in a tame and commonplace strain. Even in his highest flights he indulged in incessant repetitions, was negligent of his language, and was neither polished nor exact in his style. Notwithstanding these defects he exercised a prodigious influence over his hearers. "He forgot himself," says Sir James Mackintosh, "and everything around him. He darted fire into his audience. Torrents of impetuous and irresistible eloquence swept along their feelings and convictions." There is nothing in his finest passages which would seem to answer to this description, for to the calm eye of the reader they are marred by the want of condensation and finish, and their faults are perhaps more conspicuous than their beauties. But if his speeches are considered with reference to the influence they might exert when delivered with vehemence to partizans who were excited upon the topics of which they treat, and who would only slightly remark during the rapidity of utterance the negligence which reigns throughout his best declamation, it is easy to understand the impression they made. There is a rough vigor and animation in his phraseology, a force or plausibility in his reasoning, and a fertility in his counter arguments which would be highly effective whilst the contest raged. Of all the celebrated orators of his generation he was

the one who composed the least, and it is precisely on this account that he is the one whose speeches betray the greatest carelessness. His arguments, on the contrary, must have been carefully meditated, and as in reflecting on them the manner in which they could be rendered most telling must have constituted part of the process, even the expressions themselves must have been in some respects prepared. Far from being an instance to encourage indolence, his example confirms the proposition that no powers can enable men to dispense with industry, since the particular in which he took less pains than his compeers was also the point in which he was most defective. He had not the teeming knowledge, the enlarged views, the prophetic vision, the exuberant imagination, or the lofty eloquence of Burke; but he surpassed him as a party leader, or at least as a party debater, chiefly because he kept to the topics of the hour. His were not the grand strategic movements of which few had the patience to await the issue. They were close hand-to-hand fights with the adversaries in his front, and hence much of the interest which attended them then, and the faint impression they produce by comparison at present.

The late Lord Stanhope asked Pitt by what method he acquired his readiness of speech, and Pitt replied that it was very much due to a practice enjoined on him by his father of reading a book in some foreign language, turning it into English as he went along, and pausing when he was at a loss for a fitting word until the right expression came. He had often to stop at first, but grew fluent by degrees, and in consequence had never to stop when he afterwards entered into public life. This is the example adduced by Lord Stanhope to show the students of the Aberdeen University the necessity of training, and the means by which success is obtained. Lord Chatham brought up his son to be an orator, and the reason he came forth a consummate speaker in his youth was that he had been learning the lesson from boyhood. None of the negligence of Fox was apparent in him. His sentences, which fell from him as easily as if he had been talking, were as finished as if they had been penned. They were stately, flowing, and harmonious, kept up throughout to the same level, and set off by a fine voice and a dignified bearing. But

it must be confessed that there is a large measure of truth in the criticism that he spoke "a state-paper style." Though the language is sonorous, pure, and perspicuous, and though it perfectly defines the ideas he intended to convey, it is wanting in fire, and those peculiar felicities which arrest attention, and call forth admiration. In our opinion he was greater as a minister than as an orator if his speeches are to be judged as literary compositions, and not solely for their adaptation to a temporary purpose, which they most effectually served. His father was less equal, and his manner indeed entirely different from that of his son, but in the energy and picturesqueness of his brightest flashes Lord Chatham was as superior to Mr. Pitt as Mr. Pitt was superior to Lord Chatham in argument and the knowledge of politics and finance.

Sheridan as an orator was very inferior to the persons with whom his name is usually associated. His taste was radically vicious. His favorite sentiments were claptrap, his favorite phraseology tinsel. The florid rhetoric, the apostrophes, and the invocations which imposed upon his listeners appear now to be only fit to be addressed to the galleries by some hero of a melodrama. Burke said of his speech on the Begums in Westminster Hall, at the impeachment of Warren Hastings, "That is the true style; something neither prose nor poetry, but better than either." Moore had the short-hand writer's report, and though his own taste at that time was sufficiently oriental, he pronounced it to "be trashy bombast." There is occasionally in Sheridan a fine image or a splendid sentence, but his most highly wrought passages belong in general to the class of the false sublime. Such as he was, however, he became entirely by unremitting exertion. He never, Moore says, made a speech of any moment of which a sketch was not found in his papers, with the showy parts written two or three times over. The minutest points had been carefully considered, and he marked the precise place in which what he meant to seem the involuntary exclamation "Good God, Mr. Speaker," was to be introduced. This preparation he continued to the last. He never, in truth, acquired readiness by practice. Both Sir Samuel Romilly and Dugald Stewart said that his transitions from his learnt declamation to his extempore statements were per-

ceptible to everybody. From his inability to keep for an instant on the wing there was no gradation, and he suddenly dropped from tropes and rhetoric into a style that was singularly bald and lax. His wit, which was his chief excellence, was equally known to have been studied in the closet even before Moore printed from his papers the several forms through which many of his sarcastic pleasantries had passed from their first germ to the last edition which he produced in public. Pitt in replying to him spoke of his "hoarded repartees and matured jests." Every person who has been upon the stage remains more or less an actor when he is off it. Sheridan, the son of a player, and himself a dramatist and the manager of a theatre, had contracted this habit, and carried to charlatanism his vain attempts to conceal his labored preparation. In one of his speeches on the trial of Warren Hastings, when Mr. M. A. Taylor, who was to read the minutes referred to in the argument, asked him for the papers, he said he had omitted to bring them. "But he would abuse Ned Law, ridicule Plumer's long orations, make the court laugh, please the women, and get triumphantly through the whole." The Lord Chancellor, as he proceeded, insisted that the minutes should be read. A general cry of inquiry was raised for Mr. Sheridan's bag. Fox, alarmed lest the want of it should be the ruin of the speech, eagerly demanded of Mr. Taylor the cause of the mistake, and Taylor whispered to him, "The man has no bag." The whole scene according to Moore was a contrivance of Sheridan to raise surprise at the readiness of his resources, notwithstanding that he had shut himself up at Wanstead to elaborate this very oration, and wrote and read so hard that he complained at evenings that he had moles before his eyes. The fate which attended the attempt was just what might have been foreseen. The man who could feel it necessary upon such a point to contrive an elaborate piece of dramatic deception could never personate his part with sufficient perfection to deceive.

Sir James Mackintosh remarked "that the true light in which to consider speaking in the House of Commons was an animated conversation on public business, and that it was rare for any speech to succeed which was raised on any other basis." Canning joined in this opinion. He said that the House was a busi-

ness assembly, and that the debates must conform to its predominant character; that it was particularly jealous of ornament and declamation, and that if they were employed at all they must seem to spring naturally out of the subject. This preponderance of the business element had been of gradual growth. In the time of Lord Chatham the discussions turned much upon personalities and abstract sentiments, and were compared by Burke to the loose discussions of a vestry meeting or a debating-club. A more extensive knowledge of the minutiae of a question was required during the reign of Pitt and Fox, but far less than was demanded in the time of Canning and Brougham. Canning is an evidence that wit and eloquence may find a full exercise in the exposition of facts, and in reasoning upon details, as well as in vague and superficial generalities. His style was lighter than that of Pitt and his language more elegant, disclosing in its greater felicity his more intimate acquaintance with the masterpieces of literature. His graceful composition would have enlivened any topic even if his satirical pleasantries had been less bright and abundant. The point in which he fell below the highest orators was in his declamatory passages, which are somewhat deficient in that robustness and power, that grandeur and magnificence which thrill through the mind. The effect of his speaking was even diminished by the excess to which he carried his painstaking, by the evident elaboration of every word he uttered, by the over-fastidiousness which prevented his forgetting in his subject his care for the garb in which he clothed it. He needed a little more of that last art by which art is concealed; but what intense application did not enable him to reach would certainly not have been gained through indolence, except by the sacrifice of all the merits which have rendered him famous.

Lord Brougham, who comes next in this line of illustrious orators, whom we have named in a chronological series, has, like Cicero, discoursed largely upon his art; and not Cicero himself has insisted more strenuously upon the absolute necessity of incessant study of the best models, and the diligent use of the pen. His speeches, a selection from which, in two volumes, has been recently published, are an evidence that he has done both in his own person. His familiarity with Demosthenes is attested by his imitation of

some of his noblest passages; and he is generally understood to have written several of his celebrated perorations again and again. No man has spoken more frequently offhand, or has had a more inexhaustible supply of language, knowledge, and sarcasm at command. He, if any one, might have been supposed capable of dispensing with the preparation he has practised and enforced; and we could desire no stronger illustration of the eternal truth, that excellence and labor are never disjoined. In the speeches of Pitt, Fox, Sheridan, and Canning we seek in vain for specimens of oratory which, when separated from the context, would give an adequate idea of their powers, and do justice to their renown. Their most perfect pages would disappoint those whose opinion of their genius is chiefly derived from traditionary fame. In the case of Lord Brougham, the best panegyric of his highest eloquence is to transcribe it. It is thus that he winds up his speech on Law Reform in 1828:

"You saw the greatest warrior of the age—conqueror of Italy—humbler of Germany—terror of the North—saw him account all his matchless victories poor compared with the triumph you are now in a condition to win—saw him condemn the fickleness of Fortune, while in despite of her he could pronounce his memorable boast, 'I shall go down to posterity with the Code in my hand!' You have vanquished him in the field; strive now to rival him in the sacred arts of peace! Outstrip him as a lawgiver whom in arms you overcame! The lustre of the Regency will be eclipsed by the more solid and enduring splendor of the Reign. It was the boast of Augustus—it formed part of the glare in which the perfidies of his earlier years were lost—that he found Rome of brick and left it of marble. But how much nobler will be the Sovereign's boast, when he shall have it to say, that he found law dear and left it cheap; found it a sealed book, left it a living letter; found it the patrimony of the rich, left it the inheritance of the poor; found it the two-edged sword of craft and oppression, left it the staff of honesty and the shield of innocence!"

Nobody needs to be told that this conclusion must have been labored in advance, because it is not within the compass of human intellect to have sustained the antithesis in language so felicitous and condensed by any extempore effort. An ordinary speaker may approach the greatest in his middle strain. The test of genius is in flights like this, which,

as with the fine parts of Milton, soar to a height that lesser masters cannot approach. To an example of a prepared peroration we add one which must have been inspired at the moment, since it was in answer to an argument used in the course of the debate, and which was hardly of a nature to have been foreseen. The subject was the Eastern Slave Trade, and the date of the discussion was 1838:—

"But I am told to be of good courage, and not to despond. I am bid to look at the influence of public opinion—the watchfulness of the press—the unceasing efforts of all the societies—the jealous vigilance of Parliament. Trust, say the friends of this abominable measure, to the force which gained the former triumph. Expect some Clarkson to arise, mighty in the powers of persevering philanthropy, with the piety of a saint, and the courage of a martyr—hope for some second Wilberforce who shall cast away all ambition but that of doing good, scorn all power but that of relieving his fellow-creatures, and reserving for mankind what others give up to party, know no vocation but that blessed work of furthering justice and freeing the slave—reckon upon once more seeing a government like that of 1806—alas, how different from any we now witness!—formed of men who deemed no work of humanity below their care or alien to their nature, and resolved to fulfil their high destiny, beard the Court, confront the Peers, condemn the Planters, and in despite of planter and peer and prince, crush the foreign traffic with one hand, while they gave up the staff of power with the other, rather than be patrons of intolerance at home. I make for answer, if it please you—No. I will not suffer the upas-tree to be transplanted on the chance of its not thriving in an ungenial soil, and in the hope that, after it shall be found to blight with death all beneath its shade, my arm may be found strong enough to wield the axe which shall lay it low."

Cicero says that, as a boat, when the rowers rest upon their oars, continues to move by previous impulse in the same direction, so in a speech which has been in part composed, the extemporaneous portion proceeds in the same strain from the influence of the high-wrought declamation which has gone before. This extract from Lord Brougham is both an example of the truth of Cicero's observation, and of the pitch to which unprepared eloquence may rise. Marvellous under any circumstances, it would be absolutely miraculous if extraordinary industry did not conspire with extraordinary talent to produce the re-

sult. Orators are not made by the talk of the nurse, and it would indeed be strange if passages which are surpassed by nothing in the English language could have been conceived without the study and practice of that composition of which they are such noble specimens.

Lord Brougham states, in his "Discourse on Natural Theology, that though the body begins to decline after thirty, the mind improves rapidly from thirty to fifty, and suffers no decay till past seventy in the generality of men, while in some it continues unimpaired till eighty or ninety. Of such persons there have been more than an ordinary number in the present day; and Lord Brougham, who himself is one of them, may thus be said to have flourished in two generations. Of the speakers who belong exclusively to a later period than that of Canning we shall not touch here; but we venture to express our belief that, when the circumstances which have formed Lord Derby and Mr. Gladstone are known, it will be found that these two orators, confessedly without a rival among the men of their own standing, have attained to excellence by the same methods as their predecessors. If they have not surpassed their forerunners by doing without effort what their precursors

could only effect with diligence, as little can we admit that they fall behind them. Persons who have been thrilled and charmed by their oratory, and who are loud in its praise, yet share the notion, which is founded upon nothing, that the exhibitions of Pitt and Fox were finer still. Burke, in conformity with this hereditary delusion, spoke of that very age as of an age of mediocrity; we speak of it as an age of giants. Every era is thus unduly depressed while it is passing, and is sometimes unduly elevated when it is past. Nearly all mankind, in this respect, adopt the language of Nestor, or even believe, with the old count in "Gil Blas," that the peaches were much larger in their youth. But let those who are not imposed on by names read a speech or two of Pitt and Fox, and, when fresh from the task, listen to an oration, upon an equal occasion, of Lord Derby in the House of Lords, or of Mr. Gladstone in the House of Commons, and they will, we are confident, be ready to confess that eloquence in England is not yet upon the decline. The real improvement required is that the men who have entirely neglected the art should endeavor to repair a deficiency which deprives their knowledge of its utility by destroying its charm.

CHARACTER OF TALLEYRAND.—M. de Talleyrand displayed, in a very superior degree, the qualities of sagacity, cool determination, and preponderating influence. Not long after, at Vienna, he manifested the same endowments, and others even more rare and apposite, when representing the House of Bourbon and the European interests of France. But except in a crisis or a congress, he was neither able nor powerful. A courtier and a politician, no advocate upon conviction for any particular form of government, and less for representative government than for any other, he excelled in negotiating with insulated individuals, by the power of conversation, by the charm and skilful employment of social relations; but in authority of character, in fertility of mental resources, in promptitude of resolution, in command of language, in the sympathetic association of general ideas with public passions—in all these great sources of influence upon collected assemblies, he was absolutely deficient. He was at once ambitious and insolent, a flatterer and a scoffer, a consummate courtier in the art of pleasing and of serving without the appearance of servility! ready for everything, and capable of any pliability that might assist his fortune, preserving always the mien, and recurring at need to

the attractions of, independence; a diplomatist without scruples, indifferent as to means, and almost equally careless as to the end, provided only that the end advanced his personal interest. More bold than profound in his views, calmly courageous in danger, well suited to the great enterprise of absolute government, but insensible to the true atmosphere and light of liberty, in which he felt himself lost and incapable of action.—*M. Guizot's Memoirs of My Time.*

THE FAMILY OF TEMPERANCE.—Temperance is the father of health, cheerfulness, and old age. Drunkenness has so large a family that I cannot remember the names of one-half of them. However, disease, debt, dishonor, destruction, and death are among them.

A CHILD ON THE ETERNAL FITNESS OF THINGS.—Mr. P.'s little daughter came running to her aunt one day, saying, "Aunt Kate, little Mattie has swallowed a button!" Seeing her terror, her aunt calmly replied, "Well, what good will that do her?" Said the child very seriously, "Not any good as I see, unless she swallows a button hole!"

THE library of John Mathew Gutch, who for many years edited *Felix Farley's Bristol Journal*, and more recently distinguished himself as the editor of the "Robin Hood Garland and Ballads,"—has been disposed of by the hammer of Messrs. Sotheby & Wilkinson. The library had been the hobby of upwards of fifty years, and was particularly rich in old ballads and the literature illustrating them. One collection of these, containing upwards of 600 of the old Pennyworths, including several illustrating Shakspeare and Robin Hood, mounted in 3 volumes folio, sold for £30 10s. Another collection, formed about 1763, by Mrs. Judith Whitelocke, of Kintbury, Berks, sold for £6 6s. A collection of Ballads, printed in 1723-25, in 3 volumes, brought £3 12s. There were many volumes of local Garlands, which averaged about £1 1s. each,—one series, consisting of 80, and containing several facetious pieces, in 4 volumes, selling for £7 10s. A Garland of Roses from the Poems of the Rev. John Eagles, made by Mr. Gutch, and of which he printed 50 copies for private distribution at Worcester in 1857, brought £4 6s. Mr. Gutch was the schoolfellow of Coleridge and Charles Lamb, of whose writings he possessed several in their autograph. A most interesting holograph Common-Place Book of Coleridge sold for £6 15s. Lamb's "What is an Album" sold for £1 9s.,—and a Sonnet in his handwriting £1 18s. An original Portrait of Lamb, painted by Cary a short time prior to his decease, sold for £22. A collection of Ten Initial Letters, cut from a Manuscript of the Fourteenth Century on account of their beauty, brought £59 17s. Another collection of Thirty-two Illuminated Capitals, in one of which was St. Peter wearing the Papal Tiara, £16. A collection of 103 Initials, cut from an Ancient Italian Choral Book, £42. A Gerard's Herbal with the arms of Charles the First on sides, having the autograph of the loyal Sir John Pakington, his adherent, sold for £12 12s.,—and, according to report, was purchased by his descendant, the present First Lord of the Admiralty, to be replaced among the heirlooms of the family, to whom it is highly interesting as the parting gift of the unfortu-

nate monarch to an ancestor who for his loyalty had his estates sequestrated and well nigh lost his life, having been indicted and tried for his fidelity to his Sovereign. An extensive Collection of Bristoliana sold for £11. An Assemblage of Chattertoniana in 17 vols. for £13 15s., and other Chattertoniana in MS. including Mr. Dix's Manuscript of the Inquest, which in a former number we clearly proved to have been a forgery, £4 10s. Mr. Gutch at one time meditated a Reprint, or at least, a Selection of the principal Works of George Wither, and for this purpose had devoted himself to procuring all he could lay hands on. These in the present sale brought higher prices than hitherto. Among these, a Version of the Psalms in the autograph of the poet, unpublished, sold for £28. The published version, which is entirely different, brought £3 1s. The first edition of Abuses Stript and Whipt, £3. 6s. A Satyre dedicated to His "Majestie," £2 4s. The Fidelia of 1619, £7. The Workes, 1620, £3 6s. Juvenilia, 1622, £7. The Schollers Purgatory, in which Wither showed up the dishonesty of the Stationer's Company, £4 2s. Collection of Emblemes, £5 12s. 6d. Dark Lantern and Perpetuall Parliament, £4 2s. The Modern Statesman £2 16s. Westrow revived, one of the most interesting of Wither's works, as it contains much of his personal history, £6 2s. 6d. Suddain Flash discovering Reasons wherefore the style of Protector should not be deserted, £2. Cordial Confection, £3 6s. Salt upon Salt, £1 1s. Memorandum to London occasioned by the Pestilence, £3 3s. Divine Poems, £1 10s. There was also an original Portrait of the Poet surrounded by emblematical devices, and quaintly making his head a frontispiece to his Book of Emblems, which produced £12. A few Autograph Letters of Cowper to Lady Hesketh concluded the sale, one of which, containing his well-known Poem, "The Dog and the Water Lily," realized £12. Another in the name of his favorite Hare Beau acknowledging "Received from my master on account current with Lady Hesketh the sum of one kiss," &c. brought £2. The total of the sale was, £1,837 2s. 6d.—*Athenaeum*.

A census of the population has lately been taken in Sardinia, and one of the papers usually sent to heads of families was left at the palace. This Victor-Emanuel himself filled up, and in the column appropriated to trade or profession, described himself as "Constitutional King."—*Literary Gazette*.

Photography and the stereoscope have begun

to be employed in the medical schools of Paris in anatomical studies. It has been found that photography not only reproduces anatomical subjects most correctly, but necessarily does not expose them to the deterioration which the existing systems of preparation sooner or later occasion, whilst the stereoscope represents the subjects in relief.

From The Edinburgh Review.

1. *The Annals of San Francisco*. By Frank Soule, John H. Gibon, M.D., and James Nisbet. 8vo. New York: 1854.
2. *California Indoors and Out; or, How we Farm, Mine, and Live generally in the Golden State*. By Eliza W. Farnham. 8vo. New York: 1856.
3. *California and its Resources*. By Ernest Seyd. 8vo. London: 1858.

JUST ten years ago we laid before the readers of this Review an outline of the progress of settlement in North America, together with some general conjectures as to its future prospects, in an article on the commercial statistics of the late Mr. Macgregor. It is not without interest to ourselves, in which we hope we may find some to share, that we have recently looked back at this memorial of the thoughts and calculations of a period which already seems separated from us by a large tract of history. The Irish famine was just over. The mighty "exodus" which followed it had just commenced; and though no diviner of that day could prognosticate its dimensions or its results, yet the signs of that great event were already forcing themselves on the observation of the world. That the westward march of the nations was receiving a new and extraordinary impulse, we could perceive: more than this, much greater sagacity than ours was unable as yet to conjecture. It creates something of a solemn feeling, when we endeavor to annihilate, in imagination for a moment, those ten years—to replace ourselves at the point we occupied in 1847, peering, as well as we might, into the "dark forward and abyss of time." Given the continuance of certain conditions, experience may forecast the future; but who can foresee the continuance of those conditions? Men studied the social and economical results of the cultivation of the potato and the vine, as if these were to proceed in their old course of development to the end of time; the mysterious blights of these vegetables came on us, like the canker and the palmer worm of old, "my great army, which I will send among you:" and the populations depending on these far-spreading branches of industry have been starved, or uprooted from their homes, or changed in their habits, and our estimates and prognostics have passed away as dreams. We built our political economy on the presumed annual returns of gold and silver, as if the elements of calculation were all but established quantities:

all at once, and simultaneously, in two distant quarters of the globe, discoveries were made which have changed the entire aspect of monetary affairs, and reduced the volumes of metallic lore, produced before 1847, into as mere obsolescence as speculations on the metal plates of the Jewish Temple, or the golden bricks of King Croesus of Lydia. And thus the world advances: its ordinary cycles of progress and retreat interrupted ever and anon by strange, comet-like phenomena, which seem to have their origin far away in another order of things, and yet are, doubtless, not less reducible to general principles than the recurring events of ordinary life, and not less regularly interposed, as secondary causes, between us and that remote but infinite Will which governs all.

A few words will suffice to place succinctly before the reader the general results of the last ten years—the most important decennium, by far, in the history of colonization. Within that period the population of Canada has increased a third: that of the Australian colonies from three or four hundred thousand to nearly a million. The province of Victoria alone, scarcely existing in 1847, has now three millions of annual revenue: a future Great Britain has been founded and organized in New Zealand: three new States, and seven or eight territories, have been added to the North American Union, by occupation or by conquest from Mexico; California, with which we are now about to concern ourselves, being by far the most important of these gains. The commercial world has acquired three great emporia; two on the shores of the Pacific, of which the names are already as familiar in our ears as those of Hamburg or Amsterdam: one on the great American lakes, which, though less spoken of among ourselves, is perhaps the most remarkable creation of the three: San Francisco, Melbourne, Chicago. In the 1849 edition of Mr. McCulloch's carefully compiled Dictionary of Geography, not one of the three is even named. And, lastly, to conclude our recapitulation of the exploits of this decennium with some notice of the preparation it has made for the future extension of similar exploits—the capital it has created for future use,—we must point out that it has constructed a railway across the Isthmus of Panama, all but completed one across the Isthmus of Suez, established steam communication across all

the oceanic highways of the globe, except the Pacific, and covered the European continent and its seas with the network of the electric telegraph.

These are indeed stupendous achievements to be accomplished in one seventh of the ordinary life of man. And it is hardly probable that they will be repeated on an equal scale; not unless similar phenomena, beyond the control of ordinary human actions and agencies should recur,—the simultaneous destruction of the food of a nation, with the discovery of extensive natural magazines of gold on two different points of the earth's surface. Emigration, from these islands at least, has already considerably fallen off, and seems likely, for the present, to continue to decline. Enough, however, of the colonizing impulse still remains to render the future bright with promise; and there is probably no portion of the earth's surface, as yet all but unoccupied, which offers so vast a field for the future extension of Christendom (we use the old-fashioned word as including the religion, race, and civilization of a Christian people), as North-western America, from the Mexican frontier to or beyond the Russian boundary.

We said on the former occasion to which we now refer, that there appeared then little probability that this region, so inviting to white immigration, could receive any great amount of it by overland travel from the Atlantic States. The distance appeared too enormous—the hardships to be undergone too severe—for more than the transit of occasional recruits from the boldest class of pioneers. And notwithstanding the new element introduced into the calculation by the all-disturbing discovery of gold, and the epidemic rage for its acquisition which signalized the mad years 1849-1851, the event has certainly supported this view. As far as we can collect the facts, not above one-sixth of the white inhabitants of California have penetrated thither by the overland route; but the bones of many thousands who have perished in the attempt, are bleaching on the desolate prairies, or in the "Canyons" of the Rocky Mountains. The strange establishment of the Mormon Republic, half-way between the frontier of Kansas and that of California, might have tended greatly to facilitate the communication; but, under the circumstances, has probably rather impeded it. The mass of immigration has reached San Francisco by

sea in the first years of the gold discovery; chiefly by the magnificent fleet of "clippers" which American enterprise soon made to circulate round Cape Horn.

"The clipper ship," say the Annalists of California, "is virtually the creation of San Francisco. The necessity of bearing merchandise as speedily as possible to so distant a market,—one too which was so liable to be overstocked by goods,—early forced merchants and ship-builders interested in the California trade to invent new and superior models of vessels. Hence the modern clipper with her great length, sharp lines of entrance and clearance, and flat bottom. These magnificent vessels now perform the longest regular voyage known in commerce, running along both coasts of the Americas in about four months."

But since the construction of the railway across the Isthmus of Panama, the passenger traffic to California principally takes that course. In truth, the impracticable region which occupies the centre of North America is scarcely less than a thousand miles in average width—a barrier of several mountain ranges, alternating with sandy or rocky plains, almost without perennial rivers, and subject to a climate of extreme winter rigor. The American State of California—a country about as large as France—has an extremely simple topography. It occupies, in the first place, a long valley, bounded east by the Sierra Nevada, west by a maritime range of little elevation, and communicating with the ice through the single outlet of the harbor of San Francisco, picturesquely termed "the Golden Gate" by its modern inhabitants; and secondly, the slope of the maritime Sierra to the sea.

The region comprised within these limits appears undoubtedly, all exaggeration apart, to be one of the most desirable and lovely portions of the earth. It affords every variety of surface, from the snowy range to the widespread pastoral valley, only in extensive plain country it is rather deficient. Its climate, for purposes of human life and enjoyment, is nearly the finest known. It has a temperature answering to that of Italy; but with drier and serener skies, and an infinitely purer air. It occupies exactly the happy interval between the aridity of Mexico and the dripping climate of North-western America.

"The year," says Mr. Seyd, "is divided

into the dry and rainy seasons. The dry season includes the greatest part of the spring, all the summer, and a great part of the fall. During this time there is *constant sunshine*. Heavy dews fall in spring and autumn, whilst the summer nights, at least in high summer, are more or less dry. Near the coast the heat is moderate, owing to the breezes which blow during the hottest part of the day, and the temperature is rarely so high as that of an English summer. In some of the counties—far in the interior however—the heat is much greater in proportion to their latitude, on account of the absence of these cooling sea-breezes.

"In the middle of the day the heat in the interior is sometimes great, but it has nothing of that depressing, suffocating character which we observe during a hot summer day in England. The atmosphere retains its clearness and invigorating influence. But however warm a day may have been, towards evening the air becomes fresher and cooler; and whilst the temperature remains very mild and agreeable, it is just cool enough to make you enjoy a light blanket; and this pleasant freshness contrasts strongly with the sweltering and suffocating nights in some parts of Europe or the tropics. The rainy season generally commences in the latter part of November, and lasts till about April. But it must not be supposed that by *rainy season* we mean *perpetual rain*; it may rain sometimes for a week or fortnight together with occasional cessations during the day, but then again there are intervals of fine sunny weather, lasting also a week or a fortnight, and these are perhaps without exception the most agreeable periods of the year, so mild, so freshly green, so comfortably warm, and such a relief after a long spell of rain. In fact, the rainy season in California resembles nothing so much as a rather rainy summer in England. The temperature very rarely falls below zero, and ice has made its appearance but a few times; snow is very seldom seen except in the mountainous regions towards the Rocky Mountains, where it falls copiously, and supplies the streams with water during the summer.

"A curious feature in the climate of California is the almost total absence of thunderstorms. In the south of the state they are said to occur sometimes, but farther north they are unknown, and the rolling of the artillery of heaven has never been felt in San Francisco. Slight shocks of earthquake are felt occasionally, as all along the Pacific shores, originating, no doubt, from the volcanoes of the Sandwich Islands, some thousand miles from us; but these vibrations are very slight, and never create alarm or do the least damage.

"From the above description the reader will perceive that the climate is a very moderate one, requiring scarcely ever very light or very heavy clothing, and one might almost wear one suit of moderately thick texture, say black cloth, from year's end to year's end."

"The air of California is fresh and invigorating, having a most beneficial effect upon the blood and lungs. But its crystal clearness is most extraordinary. Looking from an elevation upon a widely extended landscape, you are surprised at the distinctness of every object: the outlines of the thirty to fifty miles distant mountains are as sharply defined as by the finest cutting instrument, so that they appear much nearer than they really are, and every shade of color is distinctly visible. Standing on Telegraph Hill in San Francisco, you have a most splendid view of the city itself, and of the large bay, with Oakland some nine miles distant on the opposite shore, and although the large vessels in the harbor appear but small boats, you can yet plainly distinguish every rope and line in them, and almost fancy you can grasp the trees of distant Oakland, so beautifully clear and transparent—almost painfully clear to the unaccustomed eye—is the atmosphere of California.

"The brilliancy of a moonlight night is so great that common print can be easily read, and objects at a great distance be discerned with little difficulty. We have ourselves, from the top of a hill, seen distinctly the houses of a town some eight miles distant."

We should be sorry to endorse all the raptures of Mr. Seyd, who writes in the avowed character of an emigration agent for California: but we believe, from comparing other accounts, that he has but little overrated the substantial merits of the climate. The drought of the summer, however, is trying to Europeans; and San Francisco itself, situated in a funnel which collects the sea blasts and discharges them inland, seems by no means an attractive locality in this respect. "If the winter be not unusually wet"—says Mrs. Farnham, who, however, has an especial grudge against the place,—

"there is some delightful weather to be enjoyed. If it be, you are flooded, and the rainy season closes, to give place to what is miscalled summer: a season so cold, that you require more clothing than you did in January; so damp with fog and mists, that you are penetrated to the very marrow; so windy, that if you are abroad in the afternoon it is a continual struggle. Your eyes

are blinded, your teeth set on edge, and your whole person made so uncomfortable by the sand that has insinuated itself through your clothing, that you could not conceive it possible to feel a sensation, short of a warm bath and shower by way of preliminaries. These, as water is very scarce (and, for the most part, very bad), it is as yet impossible to have in dwelling-houses; consequently, you give yourself up to a state of physical wretchedness, your self-respect declines, and you go on from day to day, hoping more and more faintly, on each succeeding one, that your moral nature may withstand these trials of the material, but feeling, if you are possessed of ordinary sensibilities, lively apprehensions that your friends will have cause to deplore the issue." (P. 78.)

One invaluable characteristic of the climate deserves notice: "the absence of decomposing qualities is most remarkable." Malaria, ague, low-fever, seem almost unknown, and a Chadwick would find himself as much out of place in California as a Mechi in the great Sahara. Well was it for San Francisco, during its gold fever, that other epidemics seemed to avoid it. The wretched emigrants, who died by thousands of sheer exhaustion, rather than diseases, lay unburied or half-buried almost in the very streets.

"Coffins and shrouds were luxuries which the dead needed not," say the Annalists, "and the living could not share. . . . People could not be troubled to walk slowly and reverently half a mile, in those busy times, to inter a dead stranger. A shallow hole in the nearest open space served the purpose just as well as the grandest mausoleum would have done. In grading the streets, sinking wells, and digging the foundations of houses in after years, the bones of such as had been buried in this fashion were frequently brought to light."

No Nemesis, however, visited with pestilence this savage disregard of the last decent solemnities: the corpses were mummified by the process of nature as they lay.

The better portions of California appear to be singularly adapted for almost all the agriculture of temperate regions, by soil as well as climate. If indeed we may put faith in our local authorities, every production of the earth, native and cultivated, from the cabbage to the pine tree, puts to shame the corresponding specimens of the worn-out East. But we cannot tell how much may be owing to that Cyclopean grandeur of description in which American fancy is apt to indulge. At

the "State Agricultural Fair," held at Sacramento, 1856, were exhibited, among other prodigies, a beet weighing 73 lbs.: a carrot weighing 10lb. and three feet three inches in length: "there were fifty in the same bed of equal size:" a corn stalk measuring 21 feet 9 inches in height: an apple measuring 15½ inches each way! Whatever may be the real truth in the matter of beetroot and tomatas, there can be no reasonable doubt of the enormous dimensions which the forest trees reach in some localities. Generally speaking, California, except towards the north, appears to be by no means a thickly wooded country, especially when compared with the Atlantic seaboard of the United States. The sparse character of Mexican vegetation continues for many degrees northward. But some portions of the skirts of both the Sierras are clothed with forests of incomparable grandeur: where different varieties of enormous pines, and that problematical monster, the "Wellingtonia" of English nursery-gardeners, grow and decay, generation after generation, in solitudes as yet unbroken by Yankee lumberers. "On the rancho of Captain Graham," about five miles from the Mission near which Mrs. Farnham established herself, near the coast, some sixty miles south of San Francisco,—

"is a tract of forest, in which the trees are of enormous size. On all sides of you rise immense boles, whose altitude is reckoned by hundreds of feet, and whose diameter is from ten to twelve, fourteen, and eighteen feet, at the height of a man. One known as the Big Tree, measures 300 feet, and nearly nineteen across at six feet from the ground. Yet people in looking for it not unfrequently pass it, so unnoticeable is it among its towering neighbors. These trees are of a species of cedar: the red wood of the country, of which the lumber is chiefly manufactured."

The famous forest of "Wellingtonia gigantea," from whence the specimen of bark was derived which may still be seen, we think, at the Crystal Palace, is to be found, if we may believe Mr. Seyd, in the country of Calaveras, on the eastern Nevada, and nearly in the latitude of San Francisco. "The Father of the forest" a prostrate tree, of which the same authority gives us a lithograph sketch, "measures fifty feet in diameter at the base, *supposed* height when standing above 500 feet!" that is, a good deal higher than St. Paul's! But California is not contented with suprem-

acy in the vegetable world alone. Her waterfalls and precipices, we are informed, are on a scale equally superior to all similar wonders in the old world and the new. In the Yohamite valley, Mariposa county, a river as large as the Thames at Richmond takes a single leap of 2,100 feet perpendicular, the total height of the fall being 3,100!

Such was the beautiful region over which a few Spanish missionaries maintained for two centuries their somnolent, peaceful theocracy, before the advent of the American squatters.

"Where was ever a people so steeped in contentment as that which was found here? The labors of the devoted Jesuit missionaries had planted the cross beneath those lovely skies, long years before they came hither. The Indians, were already converted, to their hands, from lawless enemies to useful and perfectly manageable servants. How they luxuriated in the ease of their abundance! How they reposed on the generous soil whose redundant energies sprang to their coarse husbandry, with a profusion scarcely equalled in any other clime habitable by the white race! With what a pleasing but unlaborious joy we may imagine them hailing the safe arrivals of the trading vessels that visited their coast! Their herds multiplied without care, and their *frijoles* and grains, once sown, required no diurnal (annual) renewing. Crops sufficient for their plentiful subsistence, —and what wanted they more? came spontaneously; the first, second, and sometimes the third year, after the seed had been sown. Their horses were fleet, and so numerous, that it was no extravagance to destroy them whenever caprice, pleasure, or convenience (and they rarely knew more earnest motives) dictated. Their greatest luxury was ease; ambition was unknown to them as a people. They were born, they matured, and died, in an undisturbed round of animal enjoyment." (*Mrs. Farnham*, p 323.)

It must, however, be added, that the chronic state of revolution in Mexico, and the fears of impending secularization, had rendered the fathers very careless in the management of their property, and brought their affairs into a state of dilapidation, long before the American irruption. Their highest period of prosperity seems to have been about 1824; from that time their wealth and civilization appear to have declined; and there can be no doubt that the few industrious and energetic dwellers in this land of indolence heartily welcomed the arrival of the Anglo-

Saxon settlers who were so soon to "improve them off the face of the earth."

The annals of Filibusterism, however, are among the meanest portions of history, nor can they be elevated into dignity by the coloring of tawdry romance, in which our American brethren are in the habit of dressing them up. We omit, therefore, all the details of the gradual annexation of California, with which the "Annals" furnish us; the "premature" attempt of the gallant Commodore Jones in 1842, who hoisted the stars and stripes at Monterey in a time of profound peace, and had to haul them down and "restore the place to its former owners, with as handsome an apology as he could make for his extraordinary proceedings;" the valorous deeds of Colonel John C. Fremont, since illustrious on a greater stage; or the "bold, daring, and energetic measures adopted in 1845, and prosecuted by Commodore Robert F. Stockton," who is evidently the favorite hero of the Annalists. The private hostilities of these gentlemen against the Creole population became national acts, and they were themselves converted, not perhaps altogether to their own satisfaction, from buccaneers into legitimate warriors, by the declaration of war between the United States and Mexico in 1846. Stockton, with three hundred sailors and marines on foot, daringly marched into the interior to attack the Mexican General, Castro, who had more than twice his number of mounted soldiers, and seven pieces of artillery, at the mission of Los Angeles. The general

"informed the commodore by a courier, 'that if he marched upon the town he would find it the grave of his men.' 'Then,' said the commodore, 'tell the general to have the bells ready to toll in the morning at eight o'clock, as I shall be there at that time.' He was there; but Castro in the meantime had broken up his camp, mounted with an armed band, and fled."

The authority of the Mexican Federation dissolved into thin air. California was annexed to the States as a territory; and after fighting through one desperate insurrection of the unhappy Creoles, who, as usual, plucked up a spirit when it was too late, the Americans consolidated their dominion by the peace of 1848, and the illegitimate title of the filibuster merged in the recognized right of the conqueror.

At the close of hostilities, California was supposed to contain from 12,000 to 15,000 white inhabitants; Creoles, Yankees, "runaway seamen, and adventurers of all nations," and not a few Mormons, the scattered fore-runners of the great westward migration of that community.

At this period there stood on the site of the future city of San Francisco, near the mission of that name, a little Spanish village entitled "Yerba Buena," which had grown up close to the "Golden Gate," and at the best point of the bay for the establishment of a harbor. In 1836, one Jacob Primer Lesse established himself as a trader on this spot. Much altercation and bitterness of spirit ensued between him and the Californian authorities of the time, before he could obtain a lot "in the spot where the St. Francis Hotel was subsequently erected, at the corner of Clay and Dupont Streets." Here he erected his house—the parent of the future city—and covered it in, with a prophetic foresight, on the 4th of July. Shortly afterwards he married a sister of General Vallejo, one of the few natives who had the sense and energy to go shares with the speculating Americans who were appropriating the land; and "from this union, on the 16th of April, 1838, sprung their oldest child, Rosalie Lesse, being the first born in Yerba Buena." This Eve of San Francisco must, therefore, if she still lives, have attained the patriarchal age of twenty. Her family, it seems, have since removed to Oregon. In 1847 the population of Yerba Buena amounted to about 450 souls. In January that year, under the auspices of "Washington A. Bartlett, chief magistrate," (the town being then held by the Americans at war with Mexico), its name was changed by ordinance to San Francisco.

By a singular coincidence, the discovery of gold, which was to transform this petty village in five years into one of the great marts of the world, took place in January 1848, just as the Americans were obtaining undisputed possession, on the land of Captain Sutter, about sixty miles east of the now Sacramento city, on the south fork of the "Rio de los Americanos." One James W. Marshall, who had contracted with Sutter to build a saw mill, first discovered the glittering particles in the mud of the brook on which he was at work.

"All trembling with excitement, he hur-

ried to his employer, and told his story. Captain Sutter at first thought it was a fiction, and the teller only a mad fool. Indeed he confesses that he kept a sharp eye upon his loaded rifle, when he, whom he was tempted to consider a maniac, was disclosing his marvellous tale. However, his doubts were all at an end when Marshall tossed on the table before him an ounce or two of the shining dust. The two agreed to keep the matter secret, and quietly share the golden harvest between them. But, as they afterwards searched more narrowly together, and gloated upon the rich deposits, their eager gestures and looks, and muttered, broken words, happened to be closely watched by a Mormon laborer employed about the neighborhood. He followed their movements, and speedily became as wise as themselves." (*Annals*, p. 132.)

Marshall, it appears, did not escape the ordinary lot of discoverers, including many a greater benefactor of his species than himself. The author of the revelation which has added so many millions to the metallic wealth of the world, "wanders poor and homeless over the land," say the Annalists. General Sutter, a Swiss by birth, a man of many projects, and the original ground landlord of Sacramento city, "at present resides at Hook Farm, leading the happy, contented life of a tiller of the soil." And so, in Mr. Carlyle's phrase, the pair "vanish from the tissue of our history," and are lost in the dense mass of human figures, swarming into the path which they have opened.

For now—in 1848—began that wonderful flood of immigration into the newly proclaimed Eldorado, which, though followed, and in some degree surpassed, by similar events in Australia, remains on record as one of the most remarkable passages in the recent history of man. The phenomena of that wild epidemic are almost beyond the power of description. Whoever attempts it seems to stray, almost inevitably, into that superlative vein which our Transatlantic brethren are so apt to use in portraying the vulgarlest occurrences, that when they have to deal with a really heroic subject, they have no resource but to pile up their magniloquence until it fairly falls over into the burlesque.

"The circles of excitement grew wider and wider, and scarcely lost strength as they spread farther distant. First the Mexicans from the nearest, and then those from the remotest provinces, flocked to California. The indolent, yet adventurous, half-wild pop-

ulation of Sonora passed in its many thousands from the south; while Oregon from the north sent its sturdy settlers in almost equal numbers. The Sandwich Islands followed, with their strange motley of white and colored races. Peru and Chili then hurried, an innumerable crowd, as fast as ships could be obtained to carry them to the land of gold. Before long China sent forward her thousands of thrifty, wandering children, feeble, indeed, both in body and mind, but persevering; and, from their union into laboring companies, capable of great feats. Australia likewise contributed her proportion of clever rascals, and, perhaps, as many clever adventurers who had not been convicted felons. The United States, which at all times contain a vast roving and excitable population, next were affected to their very centres; and armies, to use a moderate term, were organised instantly to proceed to California and share in the golden spoil. The year 1848 was lost for the land passage, but by the early summer of 1849, great and numerous caravans were in full march, by various routes, across the Rocky Mountains. Many hardships were endured by these immigrants, and numbers died on the road. But their unburied bodies and bleaching skeletons were unheeded by the succeeding throng, or only pointed out to the weary yet restless travelers the path where others had gone before, and which, perhaps, the new comers should only avoid. On—on—to the land of gold! Round Cape Horn, fleets were bearing additional thousands; while through Mexico to all her eastern ports, and especially across the Isthmus of Panama, still other thousands were hurrying by new ships on the Pacific, to the "Golden Gate." Later in the year, and somewhat diminished in intensity, the excitement produced in Europe similar results. Many of the young, strong, and adventurous, the idle, dissipated, reckless, sanguine youths of Great Britain, France, and Germany, broke through the ties of home, friends, and country, and perhaps of civilization itself, and embarked for California, to seize fortune in a bound, and with one eager clutch, or to perish in the attempt. These astonishing circumstances soon gathered a population of a quarter of a million of the wildest, bravest, most intelligent, yet most reckless, and perhaps dangerous beings ever before collected into one small district of country.—(*Annals*, pp. 133, 134.)

Our present concern is with the civil history of California, and not with the statistics of her gold-fields: we will therefore only recapitulate very briefly the results of the tables published by Mr. Newmarch in the concluding volume of "Tooke's History of

Prices." The produce of gold in California rose in 1851 to nine millions sterling, in 1852 to thirteen millions: since which time the increase has been slow, the total in 1856 having been £15,400,000. Altogether, California has added to the metallic circulation of the world about one hundred millions. How far the improvements which are going on in the process of "quartz crushing" may tend to counteract the evident decrease in the available surface deposits—never so rich as those of Australia—remains as yet unproved; but we believe that some half-dozen English companies have perished, or are in process of decent interment, under the Winding-up Act, from the prosecution of this line of enterprise, in which American speculators on the spot are said still to make very adequate profits.

We must not omit to mention, that the more recent discovery of great wealth in that rarest and most retiring of the precious products of the earth, quicksilver, bids fair to secure to California a more permanent source of prosperity than her gold-fields themselves. These mines have already cheapened quicksilver, and thereby stimulated the silver-producing industry of Mexico and South America, to such an extent, as to render improbable the prognostications of the relative change in value of gold and silver so generally indulged in of late years.

The available auriferous districts have been hitherto exclusively confined to the basin of the Sacramento River, of which San Francisco commands the natural outlet. All the maritime trade of those regions is therefore concentrated in that single spot. At the close of 1849 it numbered 20,000 inhabitants. In 1853, nearly 50,000 including 5000 Germans, 5000 French, 3000 Spanish Americans (popularly termed "Greasers"), and 3000 Chinese. Since that time the increase has been slow.

How unparalleled an aspect did this marvellous place present during those four years, into which the ordinary events of a century were crowded! A great city was raised from its foundations, and whole quarters of it four times rebuilt, after destruction by the "great fires;" its institutions organised, its municipal requirements provided for, a mass of labor, both physical and mental, bestowed on its erection equal to what may be expended in many centuries in perpetuating the somnolent existence of some Italian or German

city of old renown; and all this amidst the excitement of the neighboring gold-fields, continually exhausting and continually renewing the settled population, and with a range of prices for the commonest articles of life and industry, which alone would seem enough to have rendered the employment of such continuous labor impossible.

Every week despatched its thousands to the diggings, and saw its hundreds of successful adventurers return to dissipate their earnings in the wild enjoyment of that luxury which had established itself, the clinging parasite of wealth, in the streets of the infant metropolis. The harbor was crowded with masts, but the "ships, sailorless, lay rotting on the sea;" their crews were at the diggings, and the return of a vessel mattered little to any one but the owners, for California had nothing to send in exchange for freights of bulky merchandise, except a few ounces of precious dust. The perplexity of employers of domestic services or labor was ludicrous; but the pertinacity with which they struggled through their difficulties, was heroic.

"When subsequently immigrants began to arrive in numerous bands, any amount of labor could be obtained, provided always a most unusually high price was paid for it. Returned diggers, and those who cautiously had never went [*Anglice, gone*] to the mines, were then also glad enough to work for rates varying from twelve to thirty dollars a-day, at which terms most capitalists were somewhat afraid to commence any heavy undertaking. The hesitation was only for an instant; soon all the labor that could possibly be procured was in ample request at whatever rates were demanded. The population of a great State was suddenly flocking in on them, and no preparations had hitherto been made for its reception. Building lots had to be surveyed, and streets graded and planked, hills levelled, hollows, lagoons, and the bay itself piled, capped, filled up, and planked; lumber, bricks, and all other building materials provided at most extraordinary high prices. Houses built, finished, and furnished; great warehouses and stores erected; wharves run far out into the sea; numberless tons of goods removed from shipboard, and delivered and shipped anew everywhere; and ten thousand other things had all to be done without a moment's unnecessary delay. Long before these things were completed, the sand hills and barren ground around the town were overspread with a multitude of canvas, blanket, and bough-covered tents. The bay was alive with shipping and small craft carrying

passengers and goods backwards and forwards; the unplanked, ungraded, unformed streets—at one time moving heaps of dry sand and dust, at another miry abysses, whose treacherous depths sucked in horse and dray (and occasionally man himself), were crowded with human beings from every corner of the universe, and of every tongue; all excited and busy, plotting, speaking, working, buying and selling town lots, shiploads of every kind of assorted merchandise, the ships themselves if they could, though that was not often, gold-dust in hundredweights, ranchos square leagues in extent, with their thousands of cattle, allotments in hundreds of contemplated towns, already prettily designed and laid out,—on paper,—and, in short, speculating and gambling in every branch of modern commerce, and in many strange things peculiar to the time and the place. *And everybody made money, and was suddenly growing rich.*

"The loud voices of the eager seller and as eager buyer, the laugh of reckless joy, the bold accents of successful speculation, the stir and hum of active hurried labor, as man and brute, horse and bullock, and their guides, struggled and managed through heaps of loose rubbish, over hills of sand, and among deceiving deep mud pools and swamps, filled the amazed newly-arrived immigrant with an almost appalling sense of the exuberant life, energy, and enterprise of the place. He breathed quick and faintly, his limbs grew weak as water, and his heart sunk within him as he thought of the dreadful conflict, when he approached and mingled among that confused and terrible business battle.

"Gambling saloons, glittering like fairy palaces, like them suddenly, sprung into existence, studding nearly all sides of the Plaza, and every street in its neighborhood. As if intoxicating drinks from the well plenished and splendid bar they each contained were insufficient to gild the scene, music added its loudest if not its sweetest charms, and all was mad, feverish mirth, where fortunes were lost and won upon the green cloth in the twinkling of an eye. All classes gambled in those days, from the starch white-neckcloth professor of religion to the veriest black rascal that earned a dollar by blackening masses' boots. Nobody had leisure to think even a moment of his occupation, and how it was viewed in Christian lands. The heated brain was never allowed to get cool, while a bit of coin or dust was left. These saloons, therefore, were crowded night and day by impatient travellers, who never could satiate themselves with excitement, nor get rid too soon of their golden heaps.

"The world perhaps has never before seen such a spectacle, and probably nothing of the

kind will be witnessed for generations to come. Happy the man who can tell of those things which he saw, and perhaps himself did, at San Francisco at that time. He shall be an oracle to admiring neighbors. A city of twenty or thirty thousand inhabitants improvised. The people nearly all adult males, strong in person, clever, bold, sanguine, restless, and reckless." (*Annals*, pp. 215-7.)

"The people nearly all adult males." All the features of vice, and squalor, and brutality which these few words indicate, can never be adequately portrayed, and from much which our annalists have not hesitated to place on record, the pen of the transcriber shrinks. The few miserable women who were attracted to San Francisco by the demand of the gambling houses and other places of resort, where the mad profusion of the diggings found a vent, were drawn from Mexico, from the half-breeds of the interior, the "Kanakas" of the Sandwich Islands; many were Chinese, the most degraded of all; and not a few of the higher order of female adventurers from more civilized regions. One of our annalists' clever woodcut illustrations, headed "San Francisco Beauties, the Celestial, the Senora, and the Madame," as they might have been seen, in 1853, perambulating the streets in common, is enough to grieve the heart of the reader when he thinks of the world of utter and hopeless wretchedness concealed beneath the dashing exteriors, thus strangely brought into contact. The mere sight of an attractive woman—the mere sound of her voice—were pleasures in those days, for which the reckless miner was ready to squander a portion of his board. "Men were frequently willing to pay largely for the slight privilege of addressing one in the way of business." At eating-houses, saloons, and especially gambling houses, the proprietors accordingly found that to engage a passable "demoiselle du comptoir" was an investment profitable beyond measure; and more than one saloon girl speedily became a millionaire on her own account, either through marriage or successful speculation.

It was the result of profound meditation on this unsatisfactory state of things which induced our fair authoress, Eliza J. Farnham, to undertake that voyage to California, of which the entertaining little volume before us contains the account. Her "explanatory preface" seems indeed, to us, to need a great deal more explanation. As far as we can make

out, she must be the widow of our old friend Thomas J. Farnham, Esquire, whose travels in the "great Western Prairies" we reviewed in the year 1843. But from the circumstance that her call to visit California apparently took place on the death of that worthy person at San Francisco, in September, 1848, and from sundry allusions to cruel misconceptions, and to slanders heaped upon her "in her official as well as private character;" allusions to events of which we are compelled to confess our entire ignorance—we infer that she is a "femme incomprise," one of the "struggling advocates," as she terms them, "of woman's rights." Be this how it may, she determined, it seems, to make the private occasion which called her to California of general use to the world. She issued a circular at New York, in which she set forth that "among the many privations and deteriorating influences to which the thousands who are flocking thither will be subject, one of the greatest is the absence of woman, with all her kindly cares and powers, so peculiarly conservative to man under such circumstances." She proposed, accordingly, to go out at the head of a company of women,—one hundred, or one hundred and thirty, being enough in her opinion to make the speculation of chartering a vessel a safe one,—consisting of persons "not under twenty-five years of age, who shall bring from their clergyman, or some authority of the town where they reside, satisfactory testimonials of character, capacity, &c., and who can contribute the sum of two hundred and fifty dollars." The stern morality which resolved to inflict on the sighing Californians none but "persons above twenty-five years of age," deserves particular admiration. That due care might be taken of this convoy of strong-minded, middle-aged spinsters, she farther proposed "that the party should include six or eight respectable married men and their families." We regret to say, that this project, though formally approved of by some dozen distinguished persons of the State of New York, including the respectable name of Catherine Sedgwick, and the celebrated one of the Hon. H. Greely,—proved abortive. Whether the necessity imposed on the candidate of declaring herself above twenty-five had anything to do with this result, we cannot say. But only three ladies could be procured on these terms, to rain their "conservative influences" on the bachelors of San Francisco. Two of these, the reader will

be charmed to hear, "have returned with the means of living comfortably the rest of their days, and with unstained reputations;" the third was an inmate of Mrs. Farnham's family when she wrote.

We must not, however, part with this lady in the spirit of sarcasm. Whatever be the merit of her speculations on the subject of woman's rights, she set about farming, as soon as she reached California, with the hearty energy of a vigorous brain and body, and with true American helpfulness and resource. Her narrative is singularly cheerful and inspiring, as well as full of valuable information: and it is with regret that we learn from the close of it that her own hopes of successful industry were crushed, through the dishonesty of an agent in San Francisco, which reduced her to ruin.

That San Francisco, and the State of which it forms the capital, should have lived through this early period of anarchy, and assumed the form of tolerably regular communities, is commonly made a ground for encomium on the self-sufficing and self-forming character of the American race. And to a certain extent the praise is well merited. Our cousins do certainly show a wonderful aptitude for "getting on" under difficulties—for constructing a temporary machine, which shall do the day's work roughly, but successfully, in the absence of an organised polity. But it is not the less true—and the Annals of San Francisco, compiled by three most patriotic chroniclers, are here to testify it—that, of late years, they have lamentably failed in their attempts to organise the political system itself on a rational and solid basis. Democracy pushed to the extreme, as we now see it, seems to have two cravings which are never satisfied,—the one, for the incessant excitement of elections to all offices—the other, for assiduously disobeying, insulting, and vilifying the authorities which its own elections have established.

California became a Territory, as we have seen, in 1848, a State before the end of 1849. In the interval, the government was of course administered, according to the Constitution of the Union, by the authorities of the General Government; but Governor Riley and his subordinates appear to have refrained discreetly from taking any part in affairs; indeed, it has been whispered that, finding it impossible to keep an official staff together,

His Honor took a turn at the diggings himself during a portion of his magistracy. But as soon as the State acquired fullness of rights, her local Constitution came into complete action. Every officer, executive and judicial alike, is eligible by the people, for a longer or shorter term of office, from the Governor down to the Comptroller, Treasurer, and Surveyor-General, and from the Chief Justice of the Supreme Court down to the District Attorneys and Coroners; and the system of rotation is so ingeniously contrived as to afford the citizens the pleasurable irritation of elections going on at all times and in all corners of the State. Moreover, the Municipal Elections of San Francisco have been from the beginning matters of still greater interest and importance, and more organised corruption, than those of the State offices themselves. We need not particularise the results. Those familiar with the workings of such institutions might easily foresee them: those who judge by the effects, may find these latter amply detailed in every account of Californian affairs.

"Most persons thought the troubled days were past," says Mrs. Farnham, (after the achievements of the Vigilance Committee of 1851, of which more presently,) "and indeed for some time there appeared no reason to apprehend a return of them. But one bad and alarming feature was always observable,—the election of the worst men to office. I know it may be said that this is true of other States, as well as of California, and it is painful to have to confess it. But there is a broad distinction between such results in the older States and in this—a distinction which has two phases: one, viz., that such choices were much more dangerous there than elsewhere, because men in office were practically unchecked in their deeds. . . . Notwithstanding the enormous malfeasances known to have been committed, notwithstanding that the State is disgraced by a catalogue of official abuses and crimes, at which every good citizen stands aghast when they are recounted to him, there is not yet recorded one sentence of punishment upon an official offender. . . . But there was another, and, if possible, worse side to this political fact. This was, the positive and notorious foulness of the characters often chosen to fill public stations. It is often said of the candidates in our popular elections in other States, that we lose sight of fitness in choosing them, and it is too often true: but in California it has been frequently seen that gross, positive, disgraceful unfitness was the surest means of success. . . . There

seemed often a systematic, deliberate choosing of the worst material offered: which is ever a fatal omen for the accomplishment of right work. . . . Our supreme Judges and Members of Congress are fair indices, on those high elevations, visible to the whole country of what is continually happening on the lower places of public life. Be the station high or humble, the incumbent is infinitely more likely to disgrace than honor it." (*Mrs. Farnham*, p. 464.)

These evils are aggravated, no doubt, by the disgraceful tampering with the ballot-box which seems to have been constantly practised; but they really originated in the political recklessness of the great majority of the electors. Had they extended to the choice of legislators only, or even of executive officers, the mischief would have been comparatively trifling. The public press, which, whatever its tendency in other communities, partakes in extreme democratic societies, from the very necessity of the case, of a conservative character, helps to keep in some kind of order the very worst specimens of elective functionaries of these classes. They are despised—and this alone is a public evil—but the extent of their power of mischief is comparatively small. But when corruption reaches the seats of judgment, and makes them its permanent abiding-place, the prospects of the community are dark indeed. If we may believe the representations before us—all by American writers—California possesses not one single tribunal, scarcely a single judge, whose character commands the slightest amount of respect. Against this evil public opinion is as powerless as any external authority. In the Union, as in England, all the regular and all the irregular machinery of government—legislative, executive, and the press itself—do but result in putting "twelve men into a box;" and if these twelve men are habitually under corrupt or incapable guidance, there remains behind no power capable of controlling the evil, save one alone—the Law Martial of King Mob, popularly termed Lynch law.

The only judge who is reported to have commanded respect in California was His Honor William B. Almond; and he was appointed by the federal governor before the State was formed, not elected by the people. His Honor, at whose expense many good stories were told, "had a sovereign contempt," say the Annalists, "for Buncombe speeches,

legal technicalities, learned opinions, and triumphantly cited precedents. He was a man of quick discernment and clear judgment; and, his opinion once formed—and that sometimes occurred before even the first witness was fully heard—his decision was made."

His greatest efforts were directed towards discountenancing the impositions practised on mankind by merchant skippers, against which he set his face like a flint, insomuch that at length "Judge Almond's court became such a terror to merchants and captains of ships, that they would sooner compromise, even to a sacrifice, a disputed point with a sailor or passenger, than submit the case to the judgment of His Honor." Judge Almond's mantle, we fear, has not fallen on his elective successors. The following is Mrs. Farnham's account of a few of those with whom her ill fortune made her personally acquainted:

"One of the county judges, though well qualified for his place in point of station, ability, and cultivation, was a drunkard and debauchee: his manner of life, during the whole of his official term, was an insult to every good and self-respecting person in the community. . . . By the time his term expired, those who had helped to place him in office were heartily tired, and demanded a change of some sort. They got it. His successor is, I believe, an honest man. He would not take a bribe, I think, nor disgrace himself or his family by any immoral act; but in a written opinion, which he rashly ventured on giving, in a case which was brought before him on appeal, he says, after giving the title of the cause, in characters which no keenness in the art of deciphering has ever rendered truly; 'The court erred in adjourning the caws on motion of the constable, and afterwards trying the caws. It is therefore ordered that the judgement be reverst and a new trial ordered!'" (P. 470.)

"It was his three daughters that elected him," said a citizen, speaking of another judge, to a friend of Mrs. Farnham. The questioner looked surprised, perhaps incredulous. "It is true," he reiterated; "you can see for yourself. There are a great many single men in the country, and the Judge's daughters are fine girls, though they are ignorant. I am a single man myself, and I voted for him, though I never expect one of them to marry me, and should certainly have voted for the other man if his daughters had been out of the question."

That such judges should even ostentatiously

sympathize with the public, when public feeling happens to be against the law, is matter of course. Judge Hoffman, trying Colonel H. P. Watkins, an eminent filibuster, in 1854 thus expressed himself:

"From my heart I sympathize with the accused: but I am sworn to the execution of the law, and must discharge my duty, whatever my sympathies may be. I may admire the spirited men who have gone forth on these expeditions, to upbuild, as they claim, the broken altars, and rekindle the extinguished fires of liberty in Mexico or Lower California. It may be that they are not adventurers, gone forth to build up for themselves a cheap fortune in another land. But even were my opinion of their purposes such, and their objects as glowing and honorable as depicted by counsel, still, sitting as a Judge, I should regard only the single question, 'Has the law been violated?'"

The evidence was so clear, that the jury had "no help but to convict the accused," who was sentenced (as was likewise his associate Major Emery) to a fine of 1500 dollars. The parties afterwards professed their inability to pay the fines. While we write, it seems a doubtful question in law, or in fact, whether they can be compelled either to pay them or to be imprisoned till they do so, and it is probable that neither Colonel Watkins nor Major Emery will be much troubled in the matter: "Thus" (add our Annalists) "are matters managed in California,"

These were trifles; but when outrage and fraud rioted unpunished throughout the Republic; when the courts of justice, instead of being the terror of criminals, had become their protection and refuge; matters grew serious, and the community began to bestir itself, in mere self-defence, against the monstrous evils which itself had created, and was still creating, at every successive election.

Another cause which seems to have contributed largely to the unpopularity of the courts, was the excessive insecurity of landed titles which prevailed, and seems still to prevail, throughout California. This is in great measure owing to the confused rules and boundaries of property prevailing among the Spanish Creoles, from whom the original Yankee purchasers derived their rights. But it has been enormously aggravated by the incapacity, or worse, of the tribunals. If the reader wishes for an example of the manner in which courts of law may play into the

hands of smart speculators, he may find abundant instances in the history of California. The case of the famous "Peter Smith titles" will furnish one easy of comprehension. Dr. Peter Smith, in 1850, contracted with the city of San Francisco to take care of its "indigent sick," at four dollars a head per day! The doctor performed his side of the contract faithfully; not so the city, which, having little ready cash, mostly paid him in scrip bearing a monthly interest of three per cent. In 1851 an Act was passed to convert this floating scrip into stock; but certain creditors, of whom Peter Smith was the principal, not liking the terms of conversion, went to law with the city, recovered judgment, and the doctor took in execution "the various wharves belonging to the corporation as also the old city hall lot, and the city hospital and buildings." Meanwhile, the same property had been, as was thought, securely vested in Commissioners under the Conversion Act above mentioned. The Commissioners "made both public and private statements in the strongest terms, to the effect that any sales which might take place under the Smith judgment would be illegal, and not of the smallest value." The result of course was, that the property taken in execution was sold by the sheriff at nearly nominal prices. Again and again, therefore, Smith sued out *alias* executions, until almost the whole city property, valued at many millions of dollars, was sold in the same illusory manner to satisfy a debt of 20,000. "At first the general public were inclined to treat the whole proceedings as a farce, though a somewhat expensive one to the purchasers at the sheriff's repeated sales." But *rit bien qui rit le dernier*. To the astonishment of mankind, the Supreme Court decided "that the sales of the wharves, and certain other portions of the city property, were *legal*!" The municipality was beggared. The citizens were taxed to supply the deficiency. The "nominal purchasers" realized enormous fortunes—and the tribunal?

"It may not be easy," say our discreet Annalists, "to discover and brand the guilty persons, and people may entertain different suspicions as to their names and special concern in the grand game of spoilation. Let every one, therefore, keep his own thoughts on the business. . . . One thing seems certain; the 'manifest destiny' of San Fran-

cisco is to be plundered at all hands, and to yield easy and quickly won fortunes to her 'prominent citizens.'

Desperate cases require heroic remedies, and the disorders of the Californian bench have had the result of producing, perhaps, the most remarkable and systematic applications of Lynch Law to the body politic, which have taken place since the old German Vehmgericht became obsolete.

In 1849 the citizens of San Francisco had improvised a police of their own, to put down an association of disturbers of the public peace called the "Hounds," distinguished particularly by their outrages on the wretched women who then frequented the streets. This was succeeded in 1851, by the famous "Vigilance Committee." The state of San Francisco in that year was peculiarly frightful; and "the law, whose supposed majesty is so awful in other countries, was only a matter of ridicule." Incendiary fires—the most disorganizing to society of all calamities from the terrible suspicions they excite—began to be more than ever the subject of nightly dread. "It was at this fearful time that the Vigilance Committee was organized." A number of leading citizens bound themselves by a written constitution for the protection of life and property. A room was selected, at which one or more members of the Committee were to be in constant attendance, at all hours of the day or night, to receive reports of acts of violence. If, in the judgment of the attending member, the case was clear enough for action, he was to summon the Committee by "two strokes on a bell, to be repeated with a pause of one minute between each alarm."

A few days after its appointment, the Committee seized, tried, and condemned to death, a "Sydney Cove," of the name of Jenkins, for stealing a safe. The city authorities were "civilly desired to stand back" while the culprit was hanged, by a rope thrown over a projecting beam in the Plaza. A coroner's verdict found that he "died by strangulation, at the hands of, and in pursuance of a preconcerted action on the part of, an association of citizens styling themselves a Committee of Vigilance," of whom it proceeded to name a certain number. The entire Committee, including "some of the richest, most influential, orderly, and respectable citizens," immediately assumed, with impunity, the pub-

lic responsibility of the act, and proceeded to execute their summary jurisdiction in other cases. This first serious collision with the so-called authorities was in the case of Whittaker and Mackenzie, whom they had found guilty of various acts of burglary, robbery, and arson, and sentenced to death. The Governor of the State now interfered. The sheriff, "holding a warrant of habeas corpus," proceeded to the Committee-room, and rescued the condemned wretches. The Committee were soon summoned by the ominous alarm "on the monumental engine bell." They broke into the goal—the slight defence of the goalers and guards was of no avail. Mackenzie and Whittaker were seized again, and duly suspended from the windows of the Committee-room, "the loose ends of the halters being taken within the building itself, and forcibly held by members of the Committee." The coroner's inquest was held as usual, and, as usual, no steps were taken on it by the frightened "authorities." Branch Vigilance Committees were formed all over the State. Unknown numbers of malefactors were hanged,* flogged, or branded, or served with a polite notice to quit the State; and "the land had rest for five years."

But by 1856, the work had to be begun afresh. This time the re-organized Vigilance Committee had not merely to put down criminal outrages, but to do battle with the gross political corruption which was supposed to engender and encourage them.

"Whereas," says their constitution, "it has become apparent to the citizens of San Francisco, that there is no security for life and property, either under the regulations of society as it at present exists, or under the laws as now administered; and that by the association together of bad characters, our ballot-boxes have been stolen, and others substituted, or stuffed with votes that were not polled, and thereby our elections nullified, our dearest rights violated, and no other method left by which the will of the people can be manifested: therefore"

the old Committee of Public Safety was re-

* One of these improvised executions was witnessed by a friend of Mrs. Farnham. "Not knowing any one, and wishing to have the criminal pointed out to him, he inquired of a person who was standing a little apart, which was the man they were to hang; to which he replied, without the slightest change of countenance, 'I believe it's me, sir!' Half-an-hour after, he was suspended from the bough of a tree, and the little community dispersed without the smallest demonstration." (P. 317.)

newed, with greater solemnity than before. This time, however, the "authorities" interfered in earnest. David Terry, Judge of the Supreme Court, issued a habeas corpus in the case of one Milligan, a prisoner for robbery and election fraud in the Committee's rooms. And the governor proclaimed San Francisco in a state of insurrection, and proceeded to raise men on the side of "law and order;" low people all, we are told; nicknamed "law and murder-men" by the friends of the Committee; and oddly designated by Mr. Seyd as "a gang of meddling politicians, jesuits, demagogues, and ballot-box stuffers." The Committee, representing, it should seem, the conservative interest, pursued the even tenor of its way, in utter disregard of such feeble assailants. "Embodied in the principles of republican government," they declared, "are the truths that the majority should rule; and when corrupt officials, who have fraudulently seized the reins of authority, designedly thwart the execution of the laws, and avert punishment from the notoriously guilty, the power they usurp reverts back to the people from whom it was wrested." Up to the 20th of June they had disposed of twenty-six persons, of whom three were *dead* (hanged?), and the remainder banished: "declared guilty of 'being notoriously bad characters and dangerous persons, disturbers of the peace, and violators of the purity and integrity of the ballot-box.'" Notices to this effect were served on every person sentenced to banishment, sealed with an Eye, the symbol of the Committee. At last a "difficulty" took place, in which Judge Terry stabbed one Hopkins, a member of the Committee's police. In a few minutes between three and four thousand citizens were in arms; the partisans of "Law and Murder" were besieged and disarmed: Judge Terry clapt into prison, but afterwards liberated contemptuously. The triumph of the Committee was complete. Having thoroughly purged the community, it surrendered its power; and so ended, for the time, a revolution which, in the opinion of Mrs. Farnham, has furnished, both in its progress and completion, the grandest and most satisfactory testimony to the capacity of the Americans for self-government."

These, however, (so philosophers of the sanguine class will assure us) are but passing clouds, obscuring slightly the magnificent

prospect of Californian advance: the substantial truth to be noticed is, that amidst political institutions rotting prematurely under general contempt, and a people determined to be bound by no laws or legislature, even of their own creation, the great work of colonisation and improvement goes on as prosperously as it could have done under the most perfect of Utopias. How far the physical well-being of man may be admitted to counterbalance moral and political corruption, we will not now inquire. We fear there is a readier answer. California, with all her present advantages, and certain as she is of ultimate prosperity, is nevertheless by no means "progressing" in the ratio which was at first expected, and to which she is in truth entitled. Do what she will, she cannot attract immigration to her shores, now that the gold-fever has for the present passed away. She does not afford a field of labor attractive to the civilized and orderly portion of mankind. The first check to her astonishing career was given in 1851, when the discovery of gold in Australia carried off at once a considerable part of her restless mining population. Many of them no doubt returned, disheartened by their ill success in a region where, though the deposits are somewhat richer than in California, the labor of extraction is said to be somewhat greater; others, as our Annalists have the audacity to declare, "disgusted with the *moral contamination* of working beside the convicts of Van Diemen's Land and New South Wales." Still, the drain westward on the whole continued, and has constituted ever since a serious drawback.

California, at the close of 1853, contained about 350,000 inhabitants, of whom about one-fifth were females. In the last three years, according to Mr. Seyd, she has received "scarcely any addition to her population." The stream of emigration seems, for the present, to have been effectually diverted across the Pacific. Mr. Seyd's book is written expressly for the purpose of restoring it to his own State; and in a region where, as he tells us, "Many a maid-of-all-work, or scullery-maid, receives as high a salary as a judge in Germany; many a negro gets as much as a major or colonel in the Prussian service; and errand boys of ten years of age earn more than double the pay of an European lieutenant of the line," this should seem no

such difficult task: nevertheless the fact is otherwise; even to the roughest class of immigrants there are some general wants beyond those of mere nature; and they, too, have a sense that security, order, and civilization are not objects of entire indifference. Social improvement has, we believe, begun; but years must elapse before California redeems her character from the memories of stuffed ballot-boxes, Vigilance Committees, and respectable citizens pulling at one end of a rope which was strangling some wretched being, murdered under the hap-hazard verdict of a Lynch jury.

The sensitive minds of the Californian diggers, we have seen, shrank from the "moral contamination" of Australia. Abhorring in general all comparisons raised merely for the purpose of flattering the self-love of one people at the expense of another, we cannot resist the temptation to note, in answer to this sarcasm, the contrast afforded by the respective histories of the State and the Colony under destinies so strangely similar. When the wealth of the diggings of Victoria was first noised abroad, that province, a mere offset of New South Wales, was circumstanced much as California had been: her plains partially occupied by a few thousand "squatters" and dependents. The rush to the diggings was, if possible, even more violent, the excitement madder, than in California herself. And it was fearfully aggravated by the presence of large numbers of runaway convicts, or scarcely less dreaded "expirees and ticket-of-leave men," flocking in from the quondam prison-settlements of the neighborhood. Every one conjectured, and not unnaturally, that the scenes of the Sacramento were to be repeated with new varieties of extravagant lawlessness, on the slopes of Ballarat and Bendigo. But the fact turned out far otherwise. There was no doubt a considerable amount of crime and violence; one serious insurrection, some sanguinary roits; but the still, regular voice of old English law and order was heard throughout. The true conservative element of society, reverence for established institutions, insignificant in themselves, but most significant as a parts of a whole, carried the community safely through a struggle of unparalleled intensity. The tribunals continued their steady working throughout, never silenced, corrupted, or intimidated; never, so far as we

know, even suspected. Except in a few insulated cases, there was no recourse to irregular popular justice; it was felt that no such recourse was needed. Legal redress was never far to seek, nor unsafe to rely on, though temporary difficulties might for a while impede its attainment. Victoria is three years younger (in her auriferous character) than California. Her produce of gold is not larger. She is a less fertile, picturesque and attractive region. Yet her population already amounts to 450,000, of whom one-third are females; still a serious, but not unmanageable disproportion. Though she draws her supplies of people, on the whole, from more distant sources and by more costly routes, yet, as Mr. Seyd confesses, she is "constantly supplied with large numbers of emigrants of all classes: foreign capital is abundant and cheap, and all enterprises encouraged to their utmost extent." In respect of moral and social advance, we will institute no invidious comparison between the two: we will merely state, that notwithstanding the mass of quondam convicts supposed to be established in Victoria, the "total number of persons under police surveillance" was reported in December last not to exceed 934.

What are the causes of a difference so marked in the recent fortunes of these sister regions? We will suggest only two, and leave them to the judgment of our readers. The first is, the different management of the public lands. While those of California have been from the beginning the prize of clever speculation, yielding absolutely nothing to the State and contributing in no degree to its public purposes, the gold discoveries found those of Victoria strictly tied up under the almost pedantic restrictions of the Wakefield system, adopted, it need not be said, with a view to a wholly different state of things.

Half the proceeds of her enormous land sales were regularly remitted to England, and spent under act of Parliament by three commissioners sitting in London, but spent in supplying the colony, under strict regulations, with the very thews and sinews of her future people, with numbers of stout agricultural settlers, women especially, as the need of females was greatest; settlers of a class the most valuable of all to the colony, and whom their own unassisted exertions could not possibly have conveyed there. Between 1851 and 1857 the commissioners sent out in round numbers 30,000 male and 50,000 female emi-

grants. The local government has now possession of the land revenue, but seems disposed to spend it with due regard to the lessons of former experience. This was a case,—a rare one, we must, of course, admit,—in which red-tape succeeded where the favorite principles of modern days, Let-alone and Go-ahead, must have inevitably and signally failed.

The second cause was, and is, difference of government. The people of Victoria may boast themselves as free as those of any commonwealth under the sun: they are self-governed, in the only sense worthy of the name, making through their representatives their own laws and managing their own finances. But throughout the period of their trial, and indeed up to this day, they have been under executive officers ultimately dependent on the people, but not directly chosen by the

people, and therefore untouched by that contempt which the multitude so capriciously attaches, elsewhere, to the temporary favorites of its own ballot-box. And, what is of far more importance, their judges have been throughout appointed, after the good old European fashion, by the supreme executive authority, and practically for life. The head of the government, with little direct power but much personal influence, has been the representative of the parent State, free from the local passions of the community; and there has been in the distance the shadow of the Crown. Let those who will dispute the efficacy of these causes; we can at all events point with confidence to the result: the younger of the two golden sisters, and the less favored in natural gifts, has for the present outstripped the elder one, and seems likely to continue to do so.

OF THE IMMEDIATE CAUSE AND THE SPECIFIC TREATMENT OF PULMONARY PHTHISIS AND TUBERCULOUS DISEASES—[De la Cause &c.]
By J. Francis Churchill. (Paris, Masson.)

THIS is another attempt to draw public attention to the cure of that most incurable of all diseases, pulmonary tubercle. There is something so painful in the terrible march of this disease, snatching away, in the prime of life, the most cherished objects of human affection, that we cannot condemn those who, honestly believing they know the cause of the disease, or have found a remedy, rush to the press to make known the happy discovery. And we would distinguish between this class, to whom we believe Dr. Churchill belongs, and those who write on this disease merely for the sake of bringing their names before the public. Dr. Churchill's theory and remedy, however, both rest on too insufficient a foundation at present for any one to hold out a hope that he has hit on the right track for improving the pathology or therapeutics of consumption. His theory of the disease is simple. He supposes it arises from deficient phosphorus in the blood. His treatment is equally simple; it consists in administering phosphorus. The latter must, however, not be given in the condition of phosphorus, nor its most oxidized compound, phosphoric acid. The form in which it must be applied, is that of the hypophosphite of lime. This is the remedy, and the chief part of the book is taken up with the relation of cases in support of the efficacy of the remedy. Such cases carry conviction to

the popular mind, but unfortunately they are worth nothing to the scientific investigator of disease. The scepticism of modern medicine, if it has done nothing more, has led to the rejection, by all educated men, of theories not supported by facts, and cures founded on the relation of favorable cases alone.—*Athenæum*.

THE URÆMIC CONVULSIONS OF PREGNANCY, PARTURITION AND CHILDBED. By Dr. Carl Braun. Translated by Dr. Matthew Duncan. (Edinburgh, Sutherland & Knox.)

THIS is a valuable essay on an important subject, and those who do not possess, or cannot read Dr. Braun's very learned work on obstetrics in the original will thank Dr. Duncan for his translation of this chapter from it.—*Athenæum*.

THE TIMELY RETREAT.—My cousin had been quizzed on his supposed rejection by a pretty girl he knew very little of, and as he was rather a cool young gentleman, he one evening, when dancing with her, for want of something better to say, told her that he had just been informed that she had rejected him with scorn. The young lady looked up instantly, saying—"I should not have done so if you had asked me." Malcolm felt himself in a scrape, and replied that as he had been engaged some time, it amused him to hear people say such foolish things. The engagement was all a sham, but was the best device he could go in for at the moment.

AN OLD MAID'S RETROSPECTIONS.

I LOOK into the dreamy past, and see—what do I see?
 They look like visions now, but *then*, how real were they to me!
 I see my girlhood full of hope, my lover true and brave;
 In fancy still I hear his vow, as a pledge of truth he gave.
 It was a ring: he smiling said: "Twill serve to guard the space
 Upon thy finger, till I put another in its place."
 That first love-gift, see, here it is—Oh, what a slender band
 Though tethered by a golden chain to this poor withered hand.
 And it was in that girlish time when I perchance might see
 A youthful mother's glance of pride at the babe upon her knee,
 I envied her that happiness, and oh, my heart beat wild
 That I might one day be the matron mother of *his* child.
 'Twas woman's nature in me spoke; but scarcely had the thought
 Been formed, ere maiden pride and shame a mingled color brought:
 Vain was the guiltless blush, for though these hopes of mine might seem
 So near fulfilment then, alas, they proved indeed a dream.
 Too poor to wed, my lover true, left his own native strand,
 Thinking to win a home for me in a far distant land.
 Years passed: he wrote that silver threads were mingling with his hair.
 They were in mine—those fruits, from seed sown by the hand of Care.
 Now, whiter than the snow-clad hill, or foam that crests the wave,
 Are my thin locks; his weary head rests in a foreign grave.
 Ay, maidens, you may sigh; God grant that happier be *your* lot;
 For me, no power could make me wish this true-love dream forgot.

But after all my pains, my fears, my visions of the past,
 One ever-present hope of mine will be fulfilled at last;
 And I am happy, for I know my bridal draweth nigh—
 A union, purer, holier far in realms beyond the sky.
 In every dream by night and day I hear again *his* voice;
 I fancy that he beckons me, and calls me to rejoice;
 That, when my eyes to earth are closed, my truly-loved will be
 The first by the Eternal sent to meet and welcome me.

RUTH BUCK.

—Chambers's Journal.

MY SONG OF THE NORTH WIND.

HANG thee, vile North Easter:
 Other things may be
 Very bad to bear with,
 Nothing equals thee.
 Grim and grey North Easter,
 From each Essex-bog,
 From the Plaistow marshes,
 Rolling London fog—
 "Tired we are of summer"
 KINGSLEY may declare,
 I give the assertion
 Contradiction bare;
 I, in bed, this morning
 Felt thee, as I lay:
 "There's a vile North Easter
 Out of doors to-day!"
 Set the dust-clouds blowing
 Till each face they strike,
 With the blacks is growing
 Chimney-sweeper like.
 Fill our room with smoke-gusts
 From the chimney pipe,
 Fill our eyes with water,
 That defies the wipe.
 Through the draughty passage
 Whistle loud and high,
 Making door and windows
 Rattle, flap and fly;
 Hark, that vile North Easter
 Roaring up the vent,
 Nipping soul and body,
 Breeding discontent!
 Squall, my noisy children;
 Smoke, my parlor grate;
 Scold, my shrewish partner;
 I accept my fate.
 All is quite in tune with
 This North Eastern blast;
 Who can look for comfort
 Till this wind be past?
 If all goes contrary,
 Who can feel surprise,
 With this rude North Easter
 In his teeth and eyes?
 It blows much too often
 Nine days out of ten,
 Yet we boast our climate,
 Like true English men!
 In their soft South Easterns
 Could I bask at ease,
 I'd let France and Naples
 Bully us they please,
 But while this North Easter
 In one's teeth is hurled,
 Liberty seems worth just
 Nothing in the world.
 Come, as came our fathers.
 Heralded by thee,
 Blasting, blighting, burning
 Out of Normandie.
 Come and slay and skin us,
 And dry up our blood—
 All to have a KINGSLEY
 Swear it does him good!

—Punch.

From Blackwood's Magazine.

FOOD AND DRINK.—PART II.

THE water which drowns us as a fluent stream, can be walked upon as ice. The bullet which, when fired from a musket, carries death, will be harmless if ground to dust before being fired. The crystallised part of the oil of roses, so grateful in its fragrance—a solid at ordinary temperatures, though readily volatile—is a compound substance containing exactly the same elements, and in exactly the same proportions, as the gas with which we light our streets. The tea which we daily drink, with benefit and pleasure, produces palpitations, nervous tremblings, and even paralysis, if taken in excess; yet the peculiar organic agent—called theine—to which tea owes its qualities, may be taken by itself (as theine not as tea) without any appreciable effect.* The water which will allay our burning thirst, augments it when congealed into snow; so that Captain Ross declares the natives of the Arctic regions “prefer enduring the utmost extremity of thirst rather than attempt to remove it by eating snow.”† Yet if the snow be melted, it becomes drinkable water; and it must be melted in the mouth. Nevertheless, although, if melted before entering the mouth, it assuages thirst like other water, when melted in the mouth it has the opposite effect. To render this paradox more striking, we have only to remember that ice, which melts more slowly in the mouth, is very efficient in allaying thirst.

These facts point to an important consideration, which has been little regarded by the majority of those who have written on Food: the consideration of the profound differences which may result from some simple differences in the *state* of substances. The chemist, in his elementary analysis, necessarily gives no clue to such differences. He tells us *of* what elements an article of Food is composed, but he cannot tell us *how* those elements are combined, nor in what state the substance is. Even when he has ascertained the real composition and properties of any substance, he has still to ask the physiologist what are the *conditions* presented by the organism in which this substance is to undergo chemical transformation. We know that a change in the conditions will cause a change in the manifestation of a force; so that often what or-

dinarily takes place in the laboratory will not at all take place in the organism. Chlorine and hydrogen are gaseous having a powerful affinity for each other—that is to say, they will unite when brought together in the daylight: but if we change the conditions—if we bring them together in the dark—their affinity is never manifested; and thus, while in the sunlight they rush together with explosive force, producing an intense acid, they will remain quiescent in the darkness and for all eternity would form no combination. Again, this same chlorine decomposes water in the sun's rays; but in darkness it has no such power. If such are the effects of so simple a change in the conditions, it is easy to imagine how various must be the differences between the phenomena which occur in the laboratory, and those which the same substances present under the complex conditions of the organism.

The chemist employs vessels of glass, in which he isolates the substances he examines, keeping them free from the interference of other substances, because he knows that, unless such interference be avoided, his experiment is nullified. He knows, for example, that the water which, if poured into a red-hot crucible, flies up into his face as steam, will rapidly pass into ice if a little liquid sulphurous acid happen to be present. He knows in short, that the stronger affinity prevents the action of the weaker affinity; and to be sure of his experiment he must isolate his substances. But in the vital laboratory no such isolation is possible. The organism has no glass vessels, no air-tight cylinders. Vital processes go on in tissues which, so far from isolating the substance introduced—so far from protecting it against interference, do inevitably interfere, and are themselves involved in the very changes undergone by the substance. Thus, while it is true that an alkali will neutralise an acid out of the organism, we must be cautious in applying such a chemical principle in the administration of drugs, because the alkali stimulates a greater secretion of the gastric acid; so that over and above the amount neutralised, there will be a surplus of acid free, owing to the interference of the tissues in which the process takes place.

Besides the complications which occur from the inevitable interference of the organism itself, and from the differences resulting from differences in the state of bodies, there are

* Schleiden: *Die Pflanze*, 1858, p. 205.

† Ross: *Narrative of Second Voyage*, p. 366.

other complications arising from causes peculiarly vital. Chemistry must ever remain incompetent to solve the problems of life, if only from this, that in Biology questions of Form are scarcely less important than questions of Composition. Spread out a cell into a layer, and you will find, that in ceasing to be a cell it has ceased to act as an organ—it has lost all the properties which distinguished it as a cell. Thus, the green cells of the plant decompose carbonic acid. Even the torn leaf will equally fix the carbon and liberate the oxygen, provided its cells are preserved in their integrity of form. But if these cells are crushed, or otherwise injured, this vital property ceases, because the cell alone is capable of manifesting it.* Under the influence of yeast, sugar is decomposed into alcohol and carbonic acid; but if the yeast-cells be crushed and disorganised, their action on the sugar is said to be quite different: instead of converting it into alcohol and carbonic acid, they convert it into lactic acid. We must acknowledge, then, that when certain combinations of carbon, oxygen, hydrogen, nitrogen, and salts, assume the form of a cell, the properties of these substances become profoundly modified.

Such considerations need all our attention in dealing with so complex a question as that of Food. They show us, what indeed we had last month occasion to see in detail, the radical incompetence of Chemistry to solve any of the questions of Physiology, and urge us to reject, as misdirected labor, all attempts at establishing anything more than chemical facts in the "Chemistry of Food." It was undoubtedly a great discovery which Mulder made in 1838, that the albumen of plants was identical, or nearly so, with the albumen of animals, and consequently that, when the ox ate grass, and the lion ate the ox, both derived their nutriment from the same chemical substance. A great discovery; but we cannot agree with Moleschott in thinking this discovery first settled the basis of a science of Food. It was a chemical triumph, fruitful in results to Chemistry; but its physiological bearing has been greatly exaggerated, and has given increased impetus to that chemical investigation of Food, which, as we have said, cannot, in the nature of things be other than misleading. And although Mulder has shown the inaccuracy of Liebig's notion, that vegeta-

ble albumen is *identical* with the fibrine of the blood, and vegetable caseine with the caseine of the blood*—although he energetically repudiates as unphilosophical the idea of a chemical analysis furnishing any true standard of nutritive value, yet he does not seem to have clearly apprehended what the true method of investigation must be; and his criticism of Liebig is mainly negative.

To the chemist there may be little or no difference between plant and flesh as food; to the physiologist the difference is profound: he sees the lion perishing miserably of inanition in the presence of abundant herbage, which to the elephant or buffalo furnishes all that is needful. The ox eats the grass, and the tiger eats the ox, but will not touch the grass. The flesh of the ox may contain little that is not wholly derived from the grass; and the chemist analysing the flesh of both may point out their identity; but the question of Food is not, What are the chemical constituents of different substances? but, What are the substances which will nourish the organism? If the animal will not eat, or, having eaten, cannot assimilate, a certain substance, that substance is no food for it, be its chemical composition what it may.† We thus see that digestibility is an important element in the estimate of Food: unless the substance can be digested it cannot be assimilated, cannot nourish; although, perhaps, if assimilated, the substance might have a high value. A pound of beef-steak contains an enormous superiority of tissue-making substance over that contained in a pound of cabbage; yet to the rabbit the cabbage is the superior food, while to the dog the cabbage is no food at all.

When we consider the part played by food, as furnishing the materials out of which the organic fabric is constructed, and its actions facilitated, it seems natural to assume that the Blood is the proper standard we should have in view, and that we should designate those substances as Aliments which, directly or indirectly, go towards the formation of Blood. Yet, on a deeper scrutiny, this is seen to lead us a very little way. An analysis of Blood will neither give us a complete list of alimentary substances, nor indicate the alimentary value of each special substance. True it is that all

* Mulder: *Physiol. Chemie*, p. 917.

† It is curious that carnivora feed chiefly, sometimes exclusively, on herbivora, and not on carnivora, whose flesh most resembles their own.

* Mulder: *Versuch einer Physiol. Chemie*, i. 193.
Lehmann: *Lehrbuch der Physiol. Chemie*, iii. 170.

the tissues are formed from the Blood, and that all alimentary substances, in their final state previous to assimilation, make their way into it. But we will briefly point out why, in spite of all this, the Blood can never furnish us with the desired standard.

In the first place while Blood is truly the vehicle of nutrition, it is at the same time the vehicle of many products of decay and disintegration. It carries in its torrent the material for the use of to-day and to-morrow, but it also carries the materials which, vital yesterday, are effete to-day, unfit to be retained, and are hurrying to the various issues of excretion.* Blood is thus at once purveyor-general and general sewer, carrying life and carrying death. We shall therefore always find in it substances which are not alimentary, mingled with those which are; and we cannot separate these, so as to make our analysis of use. In the second place, among the substances normally current in the circulation we do not find several which are notoriously serviceable as aliments. Some of these, as theine, caffeine, alcohol, &c., are not present in the blood; and others, as fats and the carbohydrates, are present in quantities obviously too small for the amounts consumed as food. Finally, although substances are nutritive, or blood making, in proportion to their resemblance to blood, yet this resemblance must exist after the process of digestion, not before it; since no sooner is any substance taken into the stomach than a series of changes occurs—changes indispensable for its admission into the circulation, but which impress on it a very different character from the one it bore on its entrance. A beef-steak is assuredly more nearly allied in composition to the blood of an ox than the dewy grass of the meadow; yet the grass becomes converted into blood in the course of the changes impressed on it during digestion, and what was thus *unlike* becomes *like*, or as we say, *assimilated*. The experiments of Claud Bernard are highly suggestive on this point. He found that if sugar or albumen were injected into the veins, it was not assimilated, but was eliminated unchanged by

the kidneys; whereas, if either substance were injected into the veins together with a little gastric juice, assimilation was complete. In another experiment he found that if sugar and albumen were injected into the portal vein, which would carry them through the liver, where certain changes are always impressed on them, they would be assimilated; but if he injected them into the jugular vein, by which they would reach the lungs without passing through the liver, no assimilation would take place. We here once more see the necessity of taking into account the organism and its vital acts, whenever we would attempt an explanation of Food.

The general considerations which *a priori* caused us to relinquish the idea of finding a proper standard in the composition of the Blood, are fully confirmed by the results of Payen's experiments, which show that Blood is not a good aliment. He fed pigs on equal proportions of flesh and Blood, and found that they exhibited all the signs of starvation; whereas, when fed on flesh under similar conditions, except that blood was absent, they fattened and grew strong.*

The Blood, then, must be given up. Shall we try Milk? Others have done so before us, making it the standard of Food, because it is itself an aliment which contains all the substances necessary for the nourishment of an organism during the most rapid period of growth. Out of milk, and milk alone, the young elephant, the young lion, or the young child, extracts the various substances which furnish muscles, nerves, bones, hair, claws, &c.; milk furnishes these in such abundance, that the increase of growth is far greater during the period when the animal is fed exclusively on it, than at any subsequent period of its career. "In milk," says Prout, "we should expect to find a model of what an alimentary substance ought to be—a kind of prototype, as it were, of nutritious elements in general." The idea is so plausible that its acceptance was general. Nevertheless nothing is more certain than that milk is not this model food, since, however it may suit the young lion or the young child, we cannot feed the adult lion or the adult man on milk alone: we can feed the lion on bones and water, and the man on bread and water, but not on milk. A model food for the young, it ceases to be so for the

* See on this point John Simon, *Lectures on Pathology*, p. 23:—"Mentally we can separate these three kinds of blood, but experimentally we cannot. They are mixed together—past, present, and future—the blood of yesterday, the blood of to-day, and the blood of to-morrow—and we have no method of separating them."

* Payen: *Des Substances Alimentaires*, p. 45.

adult; that relation which existed between the food and the organism in the one case, no longer exists in the other.

If milk does not furnish us with an absolute standard (except for the young), it furnishes an approximative standard of great value. Its composition points out the proportions of inorganic substances necessary in the food of the juvenile organism, and of course approximatively in that of the adult. In 1000 parts milk contains—

Water,	873
Caseine (nitrogenous matter),	48
Sugar of milk,	44
Butter,	30
Phosphate of lime,	2.30
Other salts,	2.70

1000

The reader may remark with some surprise, that in an aliment so notoriously high in nutritive value as milk, the proportion of nitrogenous matter is so very insignificant as to render the hypothesis of nitrogenous matters being pre-eminently the nutritive matters somewhat perplexing. As we last month gave so much space to that hypothesis, we need not here re-consider it; but contenting ourselves with the indication furnished by the analysis of milk, note how that analysis further aids our investigation, by proving the necessity of four distinct classes of principles in Food. These four classes are, the inorganic, the albuminous, the oily, and the saccharine. The proportions of these substances requisite will, of course, vary with the needs of the various organisms, as modified by race, age, climate, activity, and so forth; but nutrition will be imperfect unless all four are present, either *as such*, or else under conditions of possible formation—thus fats and sugars can, we know, be formed in the organism with a proper allowance of materials; and I am strongly disposed to think that albuminous substances can also be formed, though not unless some albumen be present to act as a leaven.

We are thus, by the principle of exclusion, reduced to the one method of investigation which remains, and that is to interrogate the organism, not the laboratory.

"Experience, daily fixing our regards
On Nature's wants,"

must guide us in the search. To ascertain what substances are nutritious, we must ascertain those which really nourish; and the rel-

ative value of these can only be ascertained by extensive and elaborate experiments on the feeding of animals, conducted on rigorously scientific principles. In other words, we must adopt that very method which common sense has from time immemorial pursued; with this important difference, that instead of allowing it to be, as hitherto, wholly empirical, we must subject it to the rigor, caution, and precision, which characterises Science. And even when Science shall have established laws on this point, such as may accurately express the general value of each substance as food, there will always remain considerable difficulty in applying those laws, owing to that peculiarity of the vital organism, previously noticed—namely, that the differences among individuals are so numerous, and often so profound, as to justify the adage, "one man's meat is another man's poison." Thus, while experience plainly enough indicates that, in Europe at least, meat is more nutritious than vegetables, those who eat largely of meat being stronger and more enduring than those who eat little or none; we must be cautious in the application of such a principle. Difference of climate may, and difference of temperament certainly does, modify this question. The Hindoo sepoy, who lives on rice, would, it is said, outrun, knock down, or in any other way prove superiority in strength over the Gaucho of the Pampas, who lives on flesh. And not only are some organisms ill adapted to a flesh diet, as we have seen, but, according to Andersson, the strongest man he ever knew scarcely ever touched animal food: this was a Dane, who could walk from spot to spot carrying a stone, which was so heavy that it required ten men to lift it on to his shoulders; his chief diet was gallons of thick sour milk, tea, and coffee;* a diet which no ordinary man could support with success.

Having discussed the chief topics of Food in general, we may now ascertain what Science can tell us respecting the various articles employed as nourishment by man. Our inquiry falls naturally under two heads—first, the Alimentary Principles, considered separately; and next, the Compound Aliments, or those articles of Food and Drink which make up the wondrous variety of human nourishment.

Albumen.—This substance, familiar to all as the white of egg, constitutes an important

* Andersson: *Lake Ngami*, p. 58.

element in Food. It exists as a liquid in the blood, as a solid in flesh. When raw, or lightly boiled, it is readily digested; less so when boiled hard, or fried. Majendie has observed that the white of eggs combines many conditions favorable to digestion, for it is alkaline, contains saline matters, especially common salt, in large proportions, and it is very nearly allied to the albumen found in the chyle and blood. It is liquid, but is coagulated by the acids of the stomach, forming floculi having slight cohesion, and rendered easily soluble again by the intestinal juices. Many people imagine that white of egg is injurious, or innutritious, and they only eat the yolk. To some this may be so, and when experience proves it to be so, white of egg should not, of course, be eaten: but, as a general rule, white of egg is agreeable and nutritious. Nevertheless, if given *alone*, neither white of egg nor albumen will continue to be eaten by animals; they soon cease to eat it, and during the period in which it is taken they show unmistakable signs of starvation.

Albumen, then, is highly nutritious; and if we estimated the nutritive value of various articles according to their amounts of albumen, we should place caviare, ox-liver, and sweetbread at the top of the list, leaving the muscle of beef very far below them. The following table shows the proportions of albumen in 100 parts of various articles of food:—

Caviare,	31.00
Ox-liver,	20.19
Sweetbread,	14.00
Muscle of pigeon,	4.05
“ of veal,	3.02
“ of chicken,	3.00
“ of beef,	2.02

This table is very instructive, as showing the vanity of attempting by a chemical analysis to assign the nutritive value of any food. The most nutritive of all these articles is notoriously beef, which, according to this analysis, should be least so. This discrepancy is lessened, but not removed, when we take into account the quantity of fibrine contained in these articles, namely—

Sweetbread,	8
Veal (muscle),	19
Chicken (muscle),	20
Beef (muscle),	20

Fibrine is liquid in the serum of the blood, and is very closely allied to albumen—indeed, for a long while was supposed to be identical

with it and with the fibrine of muscle, which is now more accurately called *musculine* (by Lehmann *syntonin*). When the blood is drawn from the body, fibrine passes from the liquid to the solid state, and coagulates into what is called the *clot*, which is nothing but solid fibrine enclosing some of the red corpuscles. It was formerly supposed that this solidification was all that took place when blood fibrine passed into muscular fibre; but recent investigations have shown that muscle-fibrine is really a different substance, allied to, but not identical with blood-fibrine.

Albumen and fibrine are found abundantly in vegetables—the former being most abundant in wheat, rye, barley, oats, maize, and rice. It is found also in the oily seeds, such as almonds, nuts, &c.; in the juices of carrots, turnips, cauliflowers, asparagus, &c.* Fibrine is also abundant in the cereals, grape-juice, and juice of other vegetables. Although closely allied to animal albumen and fibrine, they are not identical with these substances, differing from them both in composition and properties; but the differences are so slight, that vegetable albumen easily passes into animal albumen in the digestive process.

Caseine is another of the albuminous substances, and may be regarded as a modification of albumen, into which it readily passes. It forms the *curd*, or coagulable matter of milk. Unlike albumen, it does not coagulate by heat. If heated in an open vessel, an insoluble pellicle is formed on the surface as we often see in the milk-jug brought up with our coffee; but this effect is produced by the action of the oxygen of the atmosphere. The proportion of caseine in different kinds of milk is as follows:—

Cow's milk,	4.48
Ewe's milk,	4.50
Goat's milk,	4.02
Asses' milk,	1.82
Human milk,	1.52

It thus appears, we hope without derogation to human dignity, that asses' milk is considerably more like that on which we were suckled, than any of the others.

Caseine forms the chief ingredient of cheese. It is an important element, as we see by its presence in milk. “The young

* Albumen forms three compounds—basic, acid, and neutral. In the white of egg, and in the serum of blood, it is a basic albuminate of soda. In certain diseases it is a neutral albuminate in the blood.

animal receives, in the form of caseine, the chief constituent of the mother's blood. To convert caseine into blood, no foreign substance is required; and in the conversion of the mother's blood into caseine, no elements of the constituents of blood have been separated. When chemically examined, caseine is found to contain a much larger proportion of the earth of bones than blood does, and that in a very soluble form, capable of reaching every part of the body. Thus, even in the earliest period of its life, the development of the organs in which vitality resides is, in the carnivorous animal, dependent on the supply of a substance identical in organic composition with the chief constituents of its blood.* Caseine is found in beans, pease, lentils, almonds, nuts, and perhaps in all vegetable juices.

These three bodies—albumen, fibrine, and caseine—are not inaptly designated "protein-bodies," even now that Mulder's idea of an organic radical, named by him "protein," has been generally given up. In the egg we see caseine arise from albumen, and in digestion caseine passes back again into albumen. Fibrine, again, appears to be only albumen with more oxygen; and it may be easily reconverted into albumen by nitrate of potash. It differs from albumen in assuming something of definite structure when coagulated—fibrilating, which albumen never does. There are many unexplained facts known respecting fibrine, which, when explained, may clear away other obscurities. Lehmann found, by experiments on himself, that animal diet produced more fibrine in his blood than was produced by vegetable diet—a fact seemingly at variance with the fact that, during starvation, the quantity of fibrine is increased, as it is also during acute inflammations. Thus, animal diet, known to be nutritious, produces a result known to be characteristic of inflammation and starvation. Nor does the difficulty cease here: the blood of the vegetable feeders, among animals, has more fibrine than that of the flesh-feeders; yet the carnivorous dog has less fibrine when fed on vegetable food than when his diet has been exclusively animal. Finally, although herbivora have more fibrine than carnivora, birds have more than both.

Gluten is not found in animals, but exists abundantly in vegetables, and is the most

important of all the nitrogenous substances, because, as we have seen, it is capable of supporting life when given alone. "It is the presence of gluten in wheaten flour that renders it pre-eminently nutritious; and its viscosity or tenacity confers upon that species of flour its peculiar excellence for the manufacture of macaroni, vermicelli, and similar pastes, which are made by a kind of wire-drawing, and for which the wheat of the south of Europe is peculiarly adapted."† The following table, which is borrowed from Dr. Pereira's work, gives the proportions of gluten in 100 parts of various vegetables:—

Wheat, Middlesex (average crop),	19. 0
" Spring	24. 0
" Thick-skinned Sicilian, .	23. 0
" Polish,	20. 0
" North American, . . .	22. 5
Barley, Norfolk,	6. 0
Oats, Scotland,	8. 7
Rye, Yorkshire,	10. 9
Rice, Carolina,	3. 60
" Piedmont,	3. 60
Maize,	5. 75
Beans,	10. 3
Pease,	3. 5
Potatoes,	4. 0
Turnips,	0. 1
Cabbage,	0. 8

These four albuminoid substances, namely albumen, fibrine, caseine, and gluten, are remarkable among other things for their extreme *instability*,—the readiness with which they are transformed, or decomposed. It is this alterability which renders them peculiarly apt to act as ferments, and to induce chemical changes in the substances with which they come in contact. It is on this alterability that their great value in nutrition depends. Further, we must remark that, no matter what is the form in which they are eaten, whether as white of egg, fibrine, caseine, or gluten, they are all reduced by the digestive process to substances named *peptones*, under which forms only are they assimilable.

Gelatine.—There is perhaps no substance on our list which more interestingly illustrates the want of a true scientific doctrine presiding over the investigations into Food than Gelatine: a substance richer in nitrogen than any of the albuminous substances, yet denied a place among the plastic elements: a substance which, under the forms of jellies and soups, is largely given to convalescents, who

* Brande's *Chemistry*, quoted by Pereira. On this subject see the chapter "The Bread we Eat," in Johnson's *Chemistry of Common Life*.

* Liebig: *Animal Chemistry*, p. 62.

get strong upon it, yet which, we are emphatically assured, has no nutritive value whatever. Mulder says that no physician, who has had experience, could doubt the nutritive value of gelatine; and we may be pretty sure that common usage, in such cases, is founded upon some solid ground, and that no substance is largely used as food which has not a nutritive value. Common usage, or what is called "common sense," must not indeed be the arbiter of a scientific question; but it has a right to be heard, when it unequivocally contradicts the conclusions of Science; and it can only be put out of court on a clear exposition of the source of its error. In the present case, Science pretends that Gelatine *cannot* be nutritive, common sense asserts that it *does* nourish; and unless the fact can be proved against common sense, it will be reasonable to suppose that Science is arguing on false premises. False, indeed, are the premises, and false the conclusion. But let us see what has been the course of inquiry.

In 1682 the celebrated Papin discovered that bones contained organic matter, and he invented a method of extraction of this matter, which occupied the chemists and savans in the early days of the French Revolution with the laudable desire of furnishing food to the famished people. A pound of bones was said to yield as much broth as six pounds of beef, and, with the true fervor of inventors, the savans declared bone-soup to be better than meat-soup. In 1817, M. D. Arcet applied steam on a grand scale to the preparation of this gelatine from bones, promising to make four oxen yield the alimentary value of five, as usually employed.

Great was the excitement, vast the preparations. In hospitals and poorhouses machines were erected which made an enormous quantity of Gelatine. Unfortunately the soup thus obtained was found far from nutritious; moreover, it occasioned thirst, digestive troubles, and finally diarrhœa. The savans heard this with equanimity. They were not the men to give up a theory on the bidding of vulgar experience. Diarrhœa was doubtless distressing, but science was not implicated in that. The fault must lie in the preparation of the soup; perhaps the fault was attributable to the soup-eaters: one thing only was positive—that the fault was *not* in the Gelatine. In this high and unshaken confidence, the savans pursued their

course. Thousands of rations were daily distributed; but fortunately these rations were not confined to the bone-soup, or else the mortality would have been terrific. Few men of science had any doubts until M. Donn   positively assured the Academy that experiments on himself, and on dogs, proved Gelatine, thus prepared, to be scarcely, if at all nutritious. He found that employing a notable quantity in his own diet caused him rapidly to lose weight, and that during the whole experiment he was tormented with hunger and occasional faintness. A cup of chocolate and two rolls nourished him more effectually than two litres and a half of bone-soup accompanied by 80 to 100 grammes of bread.* These statements were confirmed by other experimenters, and the confidence in Gelatine was rudely shaken, and would have been ignominiously overthrown, had not Edwards and Balzac published their remarkable memoir (1833), in which experiments conducted with great care and scientific rigor established the fact that although Gelatine is *insufficient* to support life, it has nevertheless nutritive value. Dogs fed on gelatine and bread became gradually thinner and feebler; but when fed on bread alone, their loss was far more rapid.

At this period it became necessary to have the question definitively settled, and the French Academy appointed a Commission to report on it. This is the celebrated "Gelatine Commission" so often referred to. The report appeared in 1841. It showed that dogs perished from starvation in presence of the Gelatine extracted from bones, after having eaten of it only a few times. When, instead of this insipid Gelatine, the agreeable jelly which pork-butchers prepare from a decoction of different parts of the pig, was given them, they ate it with relish at first, then ceased, and died on the twentieth day, of inanition; when bread or meat, in small quantities, was given, the dogs lived a longer time, but grew gradually thinner, and all finally perished. A striking difference was observed between bone-soup and meat-soup: the animals starved on the first, and flourished on the second.

The conclusion generally drawn from this Report is, that Gelatine is *not* a nutritive substance. But all that is really proved by the experiments is that Gelatine *alone* is in-

* A litre is a trifle more than a pint and a half; a gramme is about 15 1-2 grains.

sufficient for nutrition; a conclusion which is equally true of albumen, fibrine, or any other single substance. For perfect nutrition there must be a mixture of inorganic and organic substances, salts, fats, sugars, and albuminates.

When animals are fed on albumen alone, or white of egg alone, with water as the single inorganic element, they perish; but they live perfectly well on raw bones and water—the reason being that bones contain salts and small proportions of albumen and fats to supplement the Gelatine, and *they contain these in the state of organic combination*, not in the state of chemical products. The paramount importance of this last condition may be gathered from the experiments mentioned in the Gelatine Report—namely, that boiling the bones, or digesting them in hydrochloric acid, and thus resolving their cartilaginous tissue into Gelatine, *destroyed* this nutritive quality. The very bones which, when raw, supported life, failed utterly when boiled.

We call especial attention to the fact of the very small proportions of Albumen which exist in the bones, as strikingly confirming our hypothesis respecting the power of the organism to form Albumen for itself, if a small amount be present to act as a sort of leaven. Moleschott also maintains, on other grounds, that Gelatine must be converted into Albumen, since the amount of Albumen in bones is in itself utterly insufficient for the demands of the tissues; * and Mulder points to the fact that, when an animal is fed on Gelatine, we never find this substance passing away in the excreta: a sufficient proof that it must in some way have been incorporated with the organism, or decomposed in it, to subserve the purposes of nutrition.†

Liebig, obliged by evidence to admit *some* nutritive quality in Gelatine, suggests that it is confined to the formation of the gelatinous tissues. This is one of those hypotheses which reduce by their plausibility, and accordingly it has been generally adopted, although physiological scrutiny detects that this is precisely one of the uses to which Gelatine can *not* be turned. For on the one hand we see that the herbivora have gelatinous tissues, although they eat no Gelatine; and, on the other hand, we see that even the carnivora, who do obtain it in their ordinary food, cannot form

their gelatinous tissues out of it, because it is never in their blood, from which all the tissues are formed.

Bernard has shown that part of the Gelatine is converted into sugar, and sugar, we know, is necessary to the organism. It may also be converted into fat; and, as has been said, there is much evidence to show that it may be converted into Albumen among the complex processes of vital chemistry; but whatever may be the decision respecting the point, there can be no legitimate reason for denying that Gelatine ranks among nutritive principles.

Fats and Oils.—These are various and important, including suet, lard, marrow, butter, and fixed oils. Vegetables also yield a great variety of oils, fixed and volatile, or essential. The quantity procurable from 100 parts of vegetable and animal substances is as follows:

Filberts,	60
Olive seeds,	54
Cocoa-nut,	47
Almonds,	46
White mustard,	36
Linseed,	22
Maize,	9
Yolk of eggs,	28.75
Ordinary meat,	14.3
Caviare,	4.3
Ox-liver,	3.89
Milk, Cows',	3.13
“ Women's,	3.55
“ Ases',	0.11
“ Goats',	3.32
“ Ewes',	4.20
Bones of sheep's feet,	5.55
“ of ox-head,	11.54 *

Fats and oils are all difficult of digestion—more so, indeed, than most other principles; but the degree in which they are digestible is very much a matter of individual peculiarity, some men digesting large quantities with ease, others being unable to digest even small quantities. M. Berthé instituted an elaborate series of experiments on his own person, with the view of ascertaining the comparative digestibility of various fats and oils.† The following classification of his results is all we can find space for. First class, comprising those difficult of digestion: Olive oil, almond oil, poppy-seed oil. Second class, comprising those easy of digestion: Whale oil, butter and animal fats, colorless liver-oil. Third class, comprising those very easy of digestion: Pure liver-oil.

* Pereira: *Treatise on Diet*, p. 167.

† Berthé: *Moniteur des Hôpitaux*, 1856, No. 69. Canstatt: *Jahresbericht* 1856, pp. 69-72.

* Moleschott, *Kreislauf des Lebens*, p. 135.

† Mulder, p. 937.

It should be remembered that great differences are observable according to the state in which oils are ingested. If taken by themselves, they are scarcely affected by the digestive process, and act as laxatives; but if taken mingled with other substances, they may be reduced to an emulsion, and so absorbed. Thus we eat olive oil with salad, or butter with bread, and the greater part is absorbed; but the same amount of olive oil administered alone would act as a purge. It is owing, moreover, to the minute state of subdivision and mixture of the oils in all vegetable substances that they are so much more digestible than animal fats.

Dr. Pereira quotes the statement of Dr. Beaumont, that "bile is seldom found in the stomach, except under peculiar circumstances. I have observed that when the use of fat or oily food has been persevered in for some time, there is generally a presence of bile in the gastric fluids." Upon which Dr. Pereira remarks that the popular notion of oily or fatty foods "causing bile" is not so groundless as medical men have generally supposed. The reason of fat being indigestible is thus suggested:—

"In many dyspeptic individuals, fat does not become properly chymified. It floats on the contents of the stomach in the form of an oily pellicle, becoming odorless, and sometimes highly rancid, and in this state excites heartburn, nausea, and eructations, or at times actual vomiting. It appears to me that the greater tendency which some oily substances have than others to disturb the stomach, depends on the greater facility with which they evolve volatile fatty acids, which are for the most part exceedingly acrid and irritating. The unpleasant and distressing feelings excited in many dyspeptics by the ingestion of mutton-fat, butter, and fish-oils are in this way readily accounted for, since all these substances contain each one or more volatile acids to which they owe their odor. Thus mutton-fat contains hircic acid; butter, no less than three volatile acids, viz. butyric, capric, and caproic acids; while train-oil contains phœnic acid." *

The effect of a high temperature on fat is to render it still more unsuitable to the stomach; and all persons troubled with an awful consciousness of what digestion is, and not living in that happy eupeptic ignorance which only knows digestion by name, should avoid food in the cooking of which much fat

or oil has been subjected to a high temperature, as in frying in butter or lard. Melted butter, buttered toast, pastry, suet-puddings, fat hashes and stews, are afflictions to the dyspeptic; and although the oil which is eaten with salad does not assist the digestion of salad, as many writers and most salad-eaters maintain, it is assuredly far more digestible than any fat or oil which has been cooked, probably because it contains no free volatile acid.

Besides the fats and fixed oils, there are certain volatile (essential) oils employed as condiments. These are contained in the leaves and seeds of sage, mint, thyme, marjoram, fennel, parsley, anise, and caraway; to which may be added mustard, horse-radish, water-cress, onions, leeks, and various spices. The volatile oil contained in each of these substances stimulates the system, but does not incorporate itself with the organism, and is soon ejected, retaining its characteristic odor.

Starch.—The gentle housewife, familiar with starch only in its relations to the wash-tub, will be probably surprised at meeting with it among articles of food, yet under the various names of amyllum, fecula, farinaceous matter, and starch, this substance, widely distributed over the vegetable kingdom, ranks as an important alimentary principle. It must, however, be cooked for man's use. It is never found in the blood, nor in the tissues, so that we are certain it is transformed during the digestive process; and some of these transformations have been detected, first as it passes into dextrine, and thence into sugar, and most probably fat. It is classed as respiratory, or heat-producing, by Liebig and his school, on grounds we have already seen to be erroneous. The various starchy substances—sago, tapioca, arrowroot, and *tous les mois*, have been so amply treated of by Professor Johnston in his admirable *Chemistry of Common Life*, that our readers need only to be directed to his pages.

Sugar.—Sugar exists abundantly in vegetables, and in some animal substances, notably milk and liver. Dr. Pereira has compiled the following table, which exhibits the proportion of sugar in 100 parts:—

Barley-meal,	5.21
Oatmeal,	8.25
Wheat-flour,	8.48
Wheat-bread,	3.6
Rye-meal,	3.28

* Pereira, p. 171.

Maize,	1.45
Rice,	0.29
Peanse,	2. 0
Figs,	62. 5
Greengages,	11.61
Fresh ripe pears,	6.45
Gooseberries,	6.24
Cherries,	18.12
Apricot,	11.61
Peach,	16.48
Beet-root,	9. 0

That sugar is nutritious no one doubts. Although easily digested, there are persons with whom it disagrees, and in some dyspeptics it produces flatulency and acidity. There is no tissue into the composition of which it enters as a constituent, unless we make an exception in favor of muscle, in which Scherer has discovered a substance, by him named *inosite*, having the chemical composition of sugar ($C_{12}H_{12}O_{12}$), but having none of its characteristic properties, and existing, moreover, in extremely minute quantities. The sugar we find in the blood and milk is not derived from the sugar we eat; that is transformed into fat, lactic acid, and other substances. The sugar of the blood is formed by the liver, and is formed from albuminous substances in their passage through the liver, the quantity being wholly independent of any amount of sugar taken in the food, and being the same in amount when none is taken in the food.*

Because sugar forms part of no tissue, and is a carbohydrate, it is classed by Liebig among heat-making foods. But we not only saw ample reason for rejecting such an idea when we consider the general question—we must even more peremptorily reject it, now that we come to grapple with the details. Against the supposition of sugar having no plastic property, it is enough to oppose the fact that many insects feed solely on sugar and saccharine juices; and in them, therefore, it is clear that something more than heat is evolved from sugar. Lehmann also bids us remember that in the egg a small quantity of sugar exists, and this quantity increases, instead of diminishing, as the development of the chick proceeds; whereas, if sugar only served for purposes of oxida-

tion, it would be oxidised and disappear as development advanced.

In the *Chemistry of Common Life*, the subject of sugar is treated in detail, which renders repetition here superfluous. Two questions only need be touched on, Is sugar injurious to the teeth? Is it injurious to the stomach? To answer the first, we have only to point to the Negroes, who eat more sugar than any other human beings, and whose teeth are of enviable splendor and strength. To answer the second is not so easy; yet, when we learn the many important offices which sugar fulfils in the organism, we may be certain that, if injurious to all, it is only so in excess. The lactic acid formed from sugar dissolves phosphate of lime, and this as we know, is the principal ingredient of bones and teeth. By its dissolution it becomes accessible to the bones and teeth, and as sugar affects this, its utility is vindicated. But a surer argument is founded on the instinct of mankind. If we all so eagerly eat sugar, it is because there is a natural relation between it and our organism. Timid parents may therefore check their alarm at the sight of juvenile forays on the sugar-basin, and cease to vex children by forbidding commercial transactions with the lollypop merchant, and cease to frustrate their desires for barley-sugar by the horrid and never-appreciated pretext of the interdict being "for their good."

Alcohol.—If it astonished the reader to see water and salts classed as alimentary principles, if it puzzled the housewife to see starch placed on the same list, it will necessarily exasperate the members of Temperance societies to see their hateful alcohol elevated to that rank. They are accustomed to call alcohol a *poison*, to preach against it as poisonous in large doses or small, concentrated or diluted. Nevertheless, in compliance with the dictates of Physiology, and, let me add, in compliance also with the custom of physiologists, we are forced to call alcohol food, and very efficient food too. If it be not food, then neither is sugar food, nor starch, nor any of those manifold substances employed by man which do not enter into the composition of his tissues. That it produces poisonous effects when concentrated and taken in large doses, is perfectly true; but that similar effects follow when *diluted*, and taken in small doses, is manifestly false, as proved by daily experience.

* Claude Bernard's discovery of this sugar-forming function of the liver has been recently attacked by Figuier, Longet, and others; but the discussion, after exciting considerable sensation, may now be said to be finally closed in Bernard's favor. See his masterly *Leçons de Physiol. Expérimentale*, 1854-5; and the *Mémoires* on both sides in the *Annales de Sciences Naturelles*, 1854-6.

Every person practically acquainted with the subject knows that concentrated alcohol has, among other effects, that of depriving the muscous membrane of the stomach of all its water—i. e. hardens it, and destroys its power of secretion; whereas diluted alcohol does nothing of the kind, but *increases* the secretion by the stimulus given to the circulation. An instructive illustration of the difference between a concentrated and diluted dose is seen in Bardeleben's experiment on dogs. He found that forty-five grains of common salt, introduced at once into the stomach through an opening, occasioned a secretion of mucus followed by vomitings; whereas five times that amount of salt in *solution* produced neither of these effects. The explanation is simple, and will be understood by any one who has seen the salt sprinkled over a round of beef converted into brine, owing to the attraction exercised by the salt on the water in the beef: this attraction no longer exists when the salt is in solution. We might multiply examples of the differences which result from the use of concentrated and diluted agents, or from differences in the quantities employed, as when a certain amount of acid assists digestion, but, if increased, arrests it. But the demonstration of such a position is unnecessary, as no well-informed physiologist will deny it. The singular fallacy of concluding that whatever is true of a large quantity of concentrated alcohol is equally true, though in a proportionate degree, of a small quantity of diluted alcohol, lies indeed at the basis of the Total Abstinence preaching. But we need scarcely tell the physiologist that the difference of effect is absolute: a difference in *kind*, and not simply in degree.

On the other hand, it is needless to dwell on the dangers which unhappily surround the use of alcohol. Terrible is the power of this "tricky spirit;" and when acting in conjunction with ignorance and sensuality, its effects are appalling. So serious an influence does it exercise on human welfare, that we may readily extenuate the too frequent fanaticism of those zealous men who have engaged in a league for its total suppression. So glaring are the evils of intemperance, that we must always respect the motives of Temperance Societies, even when we most regret their exaggerations, and their want of care and candor in the examination of evi-

dence. They are fighting against a hideous vice, and we must the more regret that zeal for the cause leads them, as it generally leads partisans, to make sweeping charges, which common sense is forced to reject. All honor for the brave and sincere; all scorn for the noisy shallow quacks who make a *trade* of the cause!

No real gain can be achieved by any cause when it eludes or perverts the truth; and whatever temporary effect, in speeches or writings, may arise from the iteration of the statement that alcohol is poison—a poison in small quantities, as in large—always and everywhere poisonous, the cause must permanently lose ground, because daily experience repudiates such a statement as manifestly false. Alcohol *replaces* a given amount of ordinary food. Liebig tells us that, in Temperance families where beer was withheld and money given in compensation, it was soon found that the monthly consumption of bread was so strikingly increased, that the beer was twice paid for, once in money, and a second time in bread. He also reports the experience of the landlord of the Hotel de Russie at Frankfort during the Peace Congress: the members of this Congress were mostly teetotallers, and a regular deficiency was observed every day in certain dishes, especially farinaceous dishes, puddings, &c. So unheard-of a deficiency, in an establishment where for years the amount of dishes for a given number of persons had so well been known, excited the landlord's astonishment. It was found that men made up in pudding what they neglected in wine. Every one knows how little the drunkard eats: to him alcohol replaces a given amount of food.

The general opinion among physiologists is, that alcohol is only heat-producing food, and that it thereby saves the consumption of tissue. Moleschott says that, although forming none of the constituents of blood, alcohol limits the combustion of those constituents, and in this way is equivalent to so much blood. "He who has little can give but little, if he wish to retain as much as one who is prodigal of his wealth. Alcohol is the saving's bank of the tissues. He who eats little, and drinks alcohol in moderation, retains as much in his blood and tissues as he who eats more, and drinks no alcohol."

* Moleschott: *Lehre der Nahrungsmittel*, p. 162.

But the physiological action of alcohol is still unexplained; we know that it does sustain and increase the force of the body; we know that it supplies the place of a certain quantity of food; but *how* it does this we do not know. It is said to be "burnt" in the body, and to make its exit as carbonic acid and water; but no proof has yet been offered for this assertion. Some of it escapes in the breath, and in some of the secretions; but how much escapes in this way, and what becomes of the rest, if any, is at present a mystery.

Iron.—We are passing from surprise to surprise as we in turn arrive at substances undoubtedly claiming rank among alimentary principles, which nevertheless the ordinary conceptions of men are far from familiar with. After water, chalk, starch, and alcohol, are we now to celebrate the nutritive qualities of iron? Even so. That metal circulates in our blood, forming indeed an essential element of the corpuscles—existing in all pigments—in the bile, in various places—notably in the hair, where it is in proportion to the darkness of the color. The quantity of iron in the blood is but small, varying in different individuals, and different states of the same individual; those who are of what is called the sanguine temperament have more than those of the lymphatic temperament; those who are well-fed have more than those who are ill-fed. It is in almost all our animal and vegetable food, so that we do not habitually need to seek it; but the physician often has to prescribe it, either in the form of "steel wine," or in that of chalybeate waters.

Phosphorus and *Sulphur* are also indispensable, but they are received with our food. *Acids* are received with vegetable food; but they are also taken separately, especially the acetic acid, or vinegar, which, according to Prout, has either by accident or design been employed by mankind in all ages—that is to say, substances naturally containing it have been employed as aliments, or it has been formed artificially. It is owing to their acids that fruits and vegetables are necessary to man, although not necessary to the carnivora. Dr. Budd justly points to the prolonged abstinence from succulent vegetables and fruits as the cause of the scurvy among sailors. Lemon-juice is now always given to sailors with their food; it protects them from scurvy, which no amount of vinegar, however, is

sufficient to effect. We make cooling drinks with vegetable acids; and our salads and greens demand vinegar, as our cold meat demands pickles. Taken in moderation, there is no doubt that vinegar is beneficial, but in excess it impairs the digestive organs; and, as we remarked a little while ago, experiments on artificial digestion show that if the quantity of acid be diminished, digestion is retarded; if increased beyond a certain point, digestion is arrested. There is reason, therefore, in the vulgar notion, unhappily too fondly relied on, that vinegar helps to keep down an alarming adiposity, and that ladies who dread the disappearance of their graceful outline in curves of plumpness expanding into "fat," may arrest so dreadful a result by liberal potations of vinegar; but they can only so arrest it at the far more dreadful expense of their health. The amount of acid which will keep them thin, will destroy their digestive powers. Portal gives a case which should be a warning: "A few years ago, a young lady in easy circumstances enjoyed good health; she was very plump, had a good appetite, and a complexion blooming with roses and lilies. She began to look upon her plumpness with suspicion; for her mother was very fat, and she was afraid of becoming like her. Accordingly, she consulted a woman, who advised her to drink a glass of vinegar daily: the young lady followed her advice, and her plumpness diminished. She was delighted with the success of the experiment, and continued it for more than a month. She began to have a cough; but it was dry at its commencement, and was considered as a slight cold, which would go off. Meantime, from dry it became moist; a slow fever came on, and a difficulty of breathing; her body became lean, and wasted away; night-sweats, swelling of the feet and of the legs succeeded, and a diarrhoea terminated her life." Therefore, young ladies, be boldly fat! never pine for graceful slimness and romantic palor; but if Nature means you to be ruddy and rotund, accept it with a laughing grace, which will captivate more hearts than all the paleness of a circulating library. At any rate, understand this, that if vinegar will diminish the fat, it can only do so by affecting your health.

We have thus touched upon the chief Alimentary Principles, and in the next paper will review the Compound Aliments, or those articles of Food and Drink which constitute and vary our diet.

From Household Words.

MY ANNULAR ECLIPSE.

ON Monday, the fifteenth of March last, I rose soon after daylight to study two interesting documents: one, a map of England, which Mr. Warren De la Rue had intersected with three straight lines, to show the direct path to be traversed that morning by the Solar Eclipse across this island: the other, a hand-bill invitation to the public generally from the Great Western Railway Company, to an excursion to Swindon; where the darkness which, according to the astronomers, was to prevail at mid-day, would be most visible. To these aids to reflection were added a few personal observations of the state of the weather; which, as the morning advanced, was very encouraging.

The result of all this study—the first lesson in astronomical and meteorological science I ever voluntarily undertook—was a rapid toilette, a cold breakfast (I am a bachelor), a sharp walk, and a seat in a railway carriage; of which I and my friend The Count, whom I had picked up on the platform, were the earliest occupants.

"It is a singular fact," observed this friend of mine—a Scotch schoolfellow—who was looking out of the window and filling it up with his broad shoulders to prevent the intrusion of strangers; "that of the crowd of passengers now struggling for places, at least fifty per cent wear spectacles; and, of these, twenty-five per cent are adorned with white cravats." It was his passion for arithmetic (termed "counting" in Scotch schools), that gave him his title; his real name being Mac Aliquot. "The luggage, too, is exceptional," he went on to observe. "It is all mahogany and brass, if you notice. And—" here The Count, suddenly seeing some one he knew, waved his arm frantically, exclaiming: "Hi! hi! Sidery! Professor! There's plenty of room here! Come in." The signal was answered. "Capital fellow!" he said to me, as he gathered up his coat, his newspaper, his hat, and his gloves from five of the seats, which he had appropriated. "Formerly Professor of Conic Sections at Saint Cwrg's College, South Wales: and no mean astronomer, I can tell you. See what a lot of apparatus he has brought!"

"Do you include in that expression the lovely young woman clinging so gracefully to him, amidst the unwieldy pile of things at his feet; and the three young men?" I asked.

"Well, yes," said the Count, who was always as literal as an Arabic numeral. "You will see: Sidery will utilise even his daughter and sons somehow for eclipse purposes: as he will me, and you, too, if you don't mind."

"Have you room for five?" the astronomer asked with timidity.

"For any number," I answered fervently, while making room for Miss Sidery, who passed me with a gracious bend, and the sweetest unspoken "Thank you." She was followed by her brothers, to whom the professor handed in, tenderly—as if it were a well-packed baby—a great mahogany box containing his telescope. Then he delivered through the open door, several thermometers, pronouncing with each a verbal label: "dry bulb;" "wet bulb;" "red bulb;" "black bulb." Then a barometer; then a sextant, boxed up in a kind of mahogany cocked-hat; then a couple of lorgnettes; then a pair of clouded goggles; then some packets of stained glass. I felt dreadfully afraid of the professor and of all these instruments. My ignorance of every kind of heavenly body was now to be punished by seventy-seven miles of humiliation; and, I should have hated The Count for bringing it upon me, if any sort of harsh sentiment could have been possible in the benign presence of the two day-stars that shone full upon me from the opposite seat. Still the professor went on shipping apparatus with all the perseverance and with something of the manner of a wharf-clerk; calling out the names of the objects as they were taken from him: a box of lucifers; a candle; a Welsh testament, large print; a Welsh testament, small print; a copy of Jones's Diamond Classics; a roll of photographic paper; a burning glass; two ounces of gunpowder; a pot of crocuses, in full bloom; a pot of violets; a bundle of camp-stools; three umbrellas, several papers of sandwiches, and two full flasks; "for," Mr. Sidery observed, in allusion to the latter miscellanea, as he entered the carriage, with the train already in motion, "Science must be fed."

Surely they were not going to eat the candle, or the crocuses, or the gunpowder. Yet those strange appliances could hardly be wanted to observe the phenomena of an eclipse with. Not liking to show my ignorance too soon, I suppressed inquiry for the present.

By dint of packing this medley underneath the seats, and overhead in the nettings, the professor eventually found a seat for himself while we were passing Hanwell.

"We must now distribute our parts," he said when fairly settled. "There are so many phenomena to note, and so little time to note them in, that each of us must undertake to observe one, or one class of them. What will your friend be responsible for?" he asked of Mac Aliquot. "The time of occultation, the barometer, or Bailey's beads?"

I blushed to the ears; for the day-stars beamed an effulgent curiosity upon me; but The Count interrupted, to my great relief,

with "We had better leave him out: he is not scientific."

"Not scientific!" exclaimed the bright particular star gleefully. "I am so glad! There will be somebody to sympathise with my own ignorance."

I should not like to describe—even if I could—the effect of this little remark upon my sensations. Fortunately, I kept them so strictly to myself, that I did not do anything ridiculous. "The sun is to be darkened," she continued, glancing charitably at me, "I know. But I really do not know how, or why."

The Professor seemed delighted to have, or to pretend to have, somebody to teach. In a minute he had out two pocket handkerchiefs; one white, the other snuff-color. He rolled them up into balls, tight enough to play at tennis with. He suspended one between each finger and thumb. He declared that the globular lamp in the roof of the carriage was the sun, that the bandana handkerchief was the earth, and the cambric one the moon. He then imitated an orrery, with the earth moving round the sun (as far as the roof of the carriage would permit), and the moon revolving round the earth. "That being so," he always addressed me, "a time comes when the three spheres must, for a few moments, travel into one line; the moon getting between the earth and the sun, thus: you don't see the sun now," he continued, as if speaking to his daughter, but still looking my way.

"How can I, while you put your linen moon between it and my eyes?" said the young lady. "But I can see part of it."

"Of course; the moon, being smaller than the sun, and nearer to you," was the reply. "You see the outer rim of the lamp in the form of a ring, don't you? Well that's an annular eclipse."

"From annulus, a ring," whispered Sidery Tertius, popping in a quotation from his Latin dictionary.

"May I ask" (I thought I was bound not to be absolutely dumb), "why it is that the moon, being the smaller body, as you say, will obscure so much of the sun, as to leave, when the eclipse is at its height, no more than a narrow rim of the latter visible?"

Mr. Sidery and MacAliquot were both eager to let-off an answer upon me; but Sidery conquered, by generously offering to lend me a fourpenny piece. "Place it before one eye; shut the other, and look at the sun—no, not the lamp, but the real sun; which is now just enough obscured by thin clouds not to blind you. That very small disc completely obscures the sun, does it not?"

"Yes."

"Hold it further from your eye, at arm's length. Does it still hide the sun from you?"

"It does."

"Ay; but if held nearer to the sun by three or four yards, your little silver moon would cover no more of it than would produce an annular eclipse."

The Count could hold out no longer. "The distance of the sun from the fourpenny piece, when close to the eye, is about ninety-five millions of miles, and the eclipse is total; but, reduce the distance to ninety-five millions of miles, less half a dozen yards, and the eclipse becomes annular so long as you keep your eye and the two bodies in a straight line with one another. Now, the moon—"

"Very true," interrupted the lecturer, who could hold out no longer, "the further you remove the coin from your eye, the less of the sun will be eclipsed. You see, now, how it is that a small body can eclipse a large one."

"Therefore" (MacAliquot was not to be beaten); "the moon, although one quarter the size of the sun, being also only a four-hundredth part of his distance from the earth, naturally eclipses a large portion of that luminary when it passes between him and us."

"Bless me, here's Reading!" exclaimed the Professor, "and we have not appointed our observing officers yet. As, ladies," he continued, addressing his daughter with the mild rudiments of a joke twinkling in his eye, "are said to be particularly astute wherever rings are concerned; you shall watch the annulus. It will be perfect at two minutes past one o'clock, when it will be half a digit broad."

"But I don't know what a digit is, papa," murmured Bright-Eyes, looking down. "Is it the ring-finger?"

Everybody laughed except MacAliquot; who gravely informed us that a digit is the twelfth part of the circumference of the sun or moon. His friend the scientific stage-manager went on casting the parts:

"You, Charles," (his eldest son), "will fix your attention on Bailey's beads. Bailey's beads, my dear," he looked at Stella, but he meant the enlightenment he was going to administer for me, "are curious and unaccountable appearances that were first accurately noted by Mr. Bailey. During that stage of an annular eclipse when it is complete and the ring is about to be put out of shape, a number of long black parallel lines are drawn out by the moon, as if some glutinous substance had stuck to the edge of the sun, and was being pulled out in strings (the light between them giving an appearance like beads), until they break, and wholly disappear. This phenomenon has been observed during every eclipse."

"Please, papa, may I let off the gunpowder?" asked Siderly the Third, flourishing the burning-glass.

"Yes; but George" (Siderly Secundus) "must stand by with the watch, and register the power of the sun by noting the time its rays, concentrated by the burning-glass, take to explode the gunpowder."

"I fear there will be no rays to catch. Look at those provoking clouds!" Miss Siderly pointed to windward.

The astronomer surveyed first the weather, then his elaborate preparations nervously; but was too hopeful to encourage a doubt that the eclipse would be an entire success. Before we arrived at Swindon, he had distributed all his offices. I was to observe that the beasts of the field knelt down to rest; that the birds in the air fluttered back to their nests. I was to watch the crocuses in the flower-pot, that they duly partook in the universal deception as to the time of day, and closed themselves; I was to perceive that the violets gave out their more powerful night-scent. These duties were imparted to me in a tone which conveyed a threat that I should be held responsible if Nature did not behave precisely as philosophy had foretold. Charles was to hold the lighted candle between the sun and his eye, to testify at how many sun's breadths' distance from the sun the flame could be seen. MacAliquot undertook the Welsh Scriptures and the Diamond Classics, to ascertain the different degrees of darkness, by his ability to read the three sizes of print. He was also to be general timekeeper; to check off the punctuality of the eclipse in keeping the appointment astronomers had made for it, both in its first appearance, its greatest magnitude, and its exit over the face of the sun. The professor took to the telescope. He was, besides, to keep everybody at his post, and to maintain a thorough discipline amongst his corps of observation.

Swindon, ten, fifty-five. Coffee, sandwiches, tea, rolls, bread-and-butter, Banbury cakes, soda, brandy, bottled porter, pork-pies for one hundred—immediately! The young ladies at the counters of the refreshment-room conduct themselves with that deliberate self-possession which is characteristic of great minds during emergencies. The Siderly flask and sandwiches, however, make us independent of them. Meanwhile the male branches of the Siderly family have unloaded all the apparatus upon the south platform; and, being persons of great constructive abilities, have fitted up an observatory in defiance of every railway regulation, and even of a train, on the eve of running away from the Eclipse to Gloucester. They construct it of chairs purloined from the offices, wheelbarrows, their own camp-stools, umbrellas, and other impromptu materials.

Even the telescope finds a station of its own in the same precincts.

The hundred orders for refreshment have at length been executed, and some of the excursionists post themselves on a rising ground to the left; others climb the hill into the town: but the knowing ones make for the old church-yard. So many are, however, of one way of thinking, that the station is very soon quite occupied. Sofas are brought out, and ladies gracefully recline upon them, opera-glasses in hand, precisely as if they were inspecting the luminaries of her Majesty's theatre.

Eleven, thirty. Clouds pass rapidly over the sun. Some obscure him altogether; others supersede colored glasses. Mr. Siderly looks vexed and disappointed. Little Siderly lets off his "poofs!" of gunpowder; now in one minute; now in seven. MacAliquot, watch in hand, looks official and important. Miss Siderly, having as yet nothing celestial to observe, makes delightful observations to me on subjects I am better acquainted with, than the armament; such as pictures, music, and light literature. I am occasionally called to a sense of duty by our chief, who points out a cow in the meadow, and a particularly spruce sparrow hovering upon and around the wires of the telegraph. More clouds.

Eleven, thirty-five. Intense excitement. Clouds too thin to obscure the sun. Every bit of colored glass to every eye. Yet the eclipse must have come upon some of the spectators as an unexpected accident; for they have brought nothing wherewith to see the great glaring orb as in a glass, darkly. Whereupon railway workmen suddenly ascend from unexplained lower regions with bits of smoked glass, for which, people who have not courage to borrow of the better provided, distractedly bargain. One slender gentleman seizes a huge danger signal-lamp, and lifts it up before his face; but, being no Hercules, is unable to maintain it in that position long enough even for a glimpse of the sun, and restores it to its rack.

Eleven, forty. The right-hand lower edge of the sun begins to flatten. The watch trembles in MacAliquot's hand as he exclaims, "Wonderful!" The dark segment increases in size. "What a testimony is this accuracy of foretelling the exact time of the eclipse, to the power of figures!" The Count continues. "As we have always known that eleven digits and a half of the sun will be eclipsed at one o'clock to-day; we also as certainly know that on the nineteenth of August, 1887, at three o'clock in the afternoon, the next great eclipse will occur, leaving only the small fraction of a digit of the sun unobscured."

After about half of the sun had been eclipsed, came a woful disappointment;—a

total eclipse by clouds. No annulus, no flames, no Bailey's beads; very little darkness, even at the moment (two minutes past one) of the greatest obscuration. Bright-Eyes, in admiration of whom I had been again lost, woke me up by observing that the atmosphere (Miss Sidery is a distinguished amateur in water-colors) seemed to be tinted with a weak wash of Indian ink. The air was perceptibly colder, all the thermometers having fallen at a mean rate of three degrees. I am bound, however, to state that the cow in the meadow, the crocuses, the violets, and the other natural objects that came under my ken, treated the eclipse with curious unconcern—as if it were a darker cloud passing over other clouds. The spruce sparrow flew away from the wires, leisurely and playfully, over the station roof; the country people going along the road, did not even look up; every thing in the surrounding landscape conducted itself very much as usual; but, a despondent astronomer coming back from the churchyard under a load of unused instruments assured us that he saw a flight of rooks return to their nests; and Mr. Charles Sidery—who, having given up the annular eclipse in despair, had strolled into the village—testified to the jack-daw belonging to the Odd Fellow's Arms going to roost, and to a horse having been so frightened (perhaps by the darkness) that he threw his rider and ran away. We ourselves witnessed an unpleasant phenomenon. A good-looking young country squire had mistaken mid-day

for dinner-time, and, created great consternation at the station by banging every body and every thing about, in a state of distressing post-prandial excitement. He was speedily eclipsed by the police.

The journey back to London, I asked my friend The Count to describe; finding the task impossible, for reasons which need not be explained; but, as his manuscript is arranged in columns in the manner of Bradshaw's Guide, and consists of a record of the times of our passing places of note; of our arrival and departure at each station; of the number of successful puns he made, and of the number which all the rest of us failed in, I shall make no further mention of it.

It is now five weeks since the Great Solar Eclipse happened. I have been observing the stars, as much as possible, ever since; having become Mr. Sidery's pupil. Every evening, clear or cloudy, I have spent at his charming little villa at Dulwich. I find in him a friend and a confidant. Last night, during an occultation of Venus (she had hastily retired to her mamma's room after an embarrassing interview with me) I laid before the kind astronomer, while standing at the end of his telescope in the garden, a statement of my private circumstances and prospects. MacAliquot has since made his calculations, and confidently predicts that the Annular Eclipse of my bachelorhood will take place on an early day in August next.

UNNATURAL DEATHS IN ENGLAND.—The registrar-general, in his last quarterly return, shows that the mortality for all England and Wales is 22 in the thousand, while in 64 districts throughout the country in which the sanitary conditions are the least unfavorable, it is only 17 in the thousand. "Without affirming, on physiological grounds, that man was created to live a destined number of years, or to go through a series of changes which are only completed in eighty, ninety, or a hundred years, experience furnishes us with a standard which can only be said to be too high. 17 in 1000 is supplied as a standard by experience. Here we stand upon the actual. Any deaths in a people exceeding 17 in 1000 annually are unnatural deaths. If the people were shot, drowned, burned, poisoned by strychnine, their deaths would not be more unnatural than the deaths wrought clandestinely by disease in excess of the quota of natural death—that is, in excess of seventeen deaths in 1000 living." By this calculation, it would seem that the number of unnatural deaths last year was 96,520.

THIRD SERIES. LIVING AGE. 44

MAHOMMED CONVERTED ALL ANIMALS EXCEPT THE BOAR AND THE BUFFALO.—"It is a common saying and belief among the Turks, that all the animal kingdom was converted by their Prophet to the true faith, except the wild boar and buffalo, which remained unbelievers: it is on this account that both these animals are often called Christians."—*Burckhardt's Travels in Syria*, p. 135.

MEN NOT TO BE EXCUSED FOR GOOD MEANING WHEN THEIR ACTS ARE EVIL.—"To them that bid me speak well of these," said Archbishop Williams of the Sectaries, "and pity them because they are ignorant and mean well, I report that of St. Bernard to it, *ut liberius peccent, libenter ignorant*; they are willingly ignorant, that they may be wilfully factious. And through what loop-hole doth their good meaning appear? In railings, or blasphemies? I will never impute a good meaning unto them, so long as I see no such thing in their fruits."—*Hacker's Life of Williams*, part 2, p. 166.

From Chambers's Journal.
SIR.

It is doubtful whether there be another monosyllable in the language which admits of such delicate distinctions as that most common one which heads this paper—Sir. Not the trembling “No” of the bashful maiden, whose command of verbal inflection is so perfect that she makes it to fill the place of “Yes,” could be more significant: not the emphatic “There” of the dined alderman, who pushes his last plate an inch or two from his enroaching stomach with a satisfied sigh, and a comfortable and firm belief in his own mind that he has, in the highest and noblest sense, said Grace: not the “Well?” of the rival conversationalist, interrogatively fitted in at the conclusion of your very best narration, as though the point were yet to come: not the facile “Ah!” of the debt-hardened borrower, when he is reminded of the little account which, with the utmost delicacy, you have forborne to speak of until it has almost run clean out of sight for ever underneath the statute of limitations: not the “Bah!” of the attorney, so different from the same expression in the mouth of the innocent wearers of his sheepskins, when you inadvertently let fall some moral axiom or some tender sentiment, forgetting in whose presence you stand: not even the “Chur-r-r-ch, Chur-r-r-ch” of the Hyde Park democracy, when they flung, some months ago, that elongated monosyllable, with so great distinctness of meaning, at the titled Sabbath-breakers and miserable sinners of “carriage-people” in the Ring; nothing equally brief had ever such variety of meaning as this “Sir.”

Even in writing, and when it stands apart and unrelieved by “My dear,” or “Dear,” it has a certain unpleasant significance. It shows that the writer has no acquaintance, and far less friendship with the person he addresses; that, for certain, he does not know anything about him, and that, in all probability, he does not care. There is not only a stiffness and reserve, but an absolute antagonism in a “Sir” of this sort. It is more than possible that it may be followed by, “As the legal advisers of Messrs Harpy,” &c., and that the whole may be concluded—like an unprepossessing scorpion, whose worst has yet to come in the tail of it—by the signature of a legal firm. One has, in this case, to write back “Gentlemen,” too, in return for it, which, it may be, is as tremendous a sacrifice of truth as of inclination. The editor of the *Moral Lever*—by no means the talented Irish novelist of that name—begins with the “Sir” indignant, when he writes that he is in truth astonished at his once esteemed contributor requiring compensation in dress for

that blessed privilege of elevating the masses which has been afforded to him by the publication of his article; and the once esteemed contributor has made previous use of it, apologetically, in demanding modestly to know whether the *Lever* was accustomed to balance its accounts at the end of every six months or of a year.

This “Sir” epistolary may be the herald of a compulsory marriage (when it emanates, for instance, from one of the big brothers of the three Miss Malonies, denominated, for certain reasons, “Plague, Pestilence, and Famine”); of unexpected offspring of a doubtful paternity; of death, itself, even—provided, at least, that there is no property bequeathed to us, in which case we may be sure it would become “My dear Sir,” or “My very dear Sir,” in proportion to the sum; but it is never by any chance the harbinger of anything satisfactory, except perhaps in the extremely mitigated form of a receipt for the second payment of a disputed bill. “Sir” never asks you to dinner, nor even pays you a compliment, except of the most artificial character, such as that of representing somebody as your most obedient and humble servant, who, if not an utter stranger, is a foe determined upon your ruin. “Sir” is the dogged submission which the most savage hand is compelled to pay to the laws of civilisation, the transparent veil through which it strikes with undiminished power. The only social invitation which it ever heralds is that which belongs to the duello, the pressing summons to “pistols for two in the sawpit,” or other unfrequented meeting-place; nor has it anything to do with love, except at the extreme fag-end of it, when it sometimes announces Cupid’s death and the birth of mammon coincidentally, in the notice of action for breach of promise of marriage. It is the sign that the chain of friendship is broken, and that the remaining life-links which connect us and the writer must needs be formed of a far baser metal. Indeed, the only sort of excellence which the “Sir” epistolary possesses, is of a decidedly negative character; it does *not*, as far as we are aware, form part of the formula of a writ.

The “Sir” colloquial, on the other hand, may be urbane and graceful enough; the tongue can express by inflection what it is not in the power of the pen through the same term to convey. A trivial and common-place remark of ours—for we do make such things on rare occasions, and at very long intervals—to a fellow-traveller in a railway-carriage, has been sometimes replied to by this little word, in a manner (before our marriage, that is) which has set our heart beating, and our cheeks aflame; our youth and beauty were remarkable at one period, and we have now

and then been forcibly recalled to a sense of them by the silvery softness of this monosyllable "Sir," expressed with all the admiring modesty of sweet seventeen. What a totally different significance has the very same word in the mouth of our friend, Bullion of the Exchange!—Bullion, who sits opposite to us in church, and annoys us by his condescension and assumption of supercelestial dignity—Bullion, whom one wonders the clergyman does not rebuke from the pulpit, saying: "Miserable sinner, behave yourself as such," instead of giving a piece of his mind to the charity-boy asleep in the aisle, who does not want it. You should hear his "Sir" in a railway-carriage. Ask him what's o'clock, offer him a newspaper, tread upon his gouty toe, (bore him, be polite to him, or insult him, the result will be all the same,) and if he does not happen to know that you also are a very rich man indeed, what a terrible monosyllable he will make of it! "Do you know to whom you are addressing yourself?" "Confound your impertinence!" and "Who in the name of all first-class passengers may you be?" are all implied in his enunciation of "Sir!"

Alone, this word is absolute and of the greatest consequence, like any rich bachelor uncle; like him, too, married to another, it loses all importance, and becomes of quite fifth-rate account. The snarling "Yessir," the mendacious "Comingsir," of the hotel waiter, express only respect with the chill off, and very little even of that. The "By-your-leave-sir" of the luggage-porter, so far from being an homage to your rank and character, is the prologue, and sometimes even the epilogue, to your being run over by a cast-iron truck. The "What, Sir!" "Me, Sir?" of offended dignity, instead of being relieved and palliated by this respectful monosyllable, is sharpened and rendered all the more ferocious by it; while the phrase "You, Sir," possesses all the sombre significance of the

ancient "Sirrah," and is commonest in the mouth of the angry pedagogue, with cane in hand. Lastly, what a world of meaning, deep and wide, is conveyed by the "Sir" oratorical! While it appears to refer solely to some august personage in a wig and other superfluities, who may happen for the nonce to be the Speaker of the House of Commons, it in reality typifies the whole civilized world, and sometimes (when an honorable member gets impassioned) even the starry firmament in addition. Heaven itself is called to witness to the shameful treatment of the independent electors of Ballyblarney, to their having been seraped under the harrow of the Saxon, by the aid of this unconscious "Surh-rh-rh." By "Sir-r-r," too, a treacherous and perfidious government is warned that, though it may not be placed in an ignominious minority *that* night, a day *will* come when the vials of wrath will be poured out upon it, and when not a place above the value of two thousand a year will be left among its dissipated atoms; and, by the same word, a factious opposition is solemnly advised, as by the still small voice of conscience itself, to cease to assist by their unscrupulous and obstructive policy, the foreign invader and the domestic anarchist. By this, too, the country is informed, amidst tumultuous cheering, that its state of prosperity is unexampled, and its present height of social happiness the greatest which it has ever yet attained; and, by this, it is abjured to hesitate, amidst tumultuous cheering likewise, lest the small end of the wedge be introduced, and the flag which for a thousand years has braved the battle and the breeze be hoisted half-mast high, because England's glory has set. It is indeed the unalterable opinion of the writer of this paper that, should this term of "Sir" be eliminated from our language, the destruction of the constitution would follow as a matter of course.

HEALTH is the greatest of all bodily pleasures, but the least thought of. Flattery is a sort of bad money, to which our vanity gives currency. It is the perfection of happiness neither to wish for death nor to fear it. The virtue of prosperity is temperance; the virtue of adversity is fortitude. Levity is often less foolish, and gravity less wise, than each of them appear. Nothing elevates us so much as the presence of a spirit similar yet superior to our own.

PREPARATIONS for the work of the emancipation of the serfs are going on in Russia with activity. A letter from St. Petersburg states that a new journal has just been founded in that capital, under the title of the "Journal of Landed Proprietors," the editors of which announce that they intend to devote their columns specially to the propagation of the great measure of reform undertaken by the Emperor Alexander.

From Household Words.

THE BLUE DYE PLANT.

THE indigo plant is a beautiful, bright green grass, or shrub; and is called a biennial, because it passes through all the phases of its existence in two years. Its leaves consist generally of a collection of leaflets arranged, alternately, one above the other upon each side of the petiole or leaf-stalk. At the base of the leaf-stalk, but separated from it, are two leaflets called stipules, which are distinguishable from the others by having no median nervure or vein down the middle. In the Monocotyledonic plants, or plants with one primordial leaf, such as the palm-trees, the stipules form the sheaf,—a kind of living cradle provided by Nature for the protection of the leaves during their tender infancy.

The bright-red flowers of the indigo plant, which are all assembled together at the summit of the peduncles or flower-stalks, present the appearance, like the sweet-pea in blossom, of a butterfly; for this reason all the plants of this class are called papilionaceous, from the Latin papilio,—a butterfly. The shapes of the petals or flower-leaves, which to the number of five compose this blossom, are so peculiar that each of them has received a distinct name. Thus the large upper one, which turns backwards, is called the standard or flag; the two next, which are both alike and placed one on each side, are the wings; the lower one between the wings is the boat or keel, and is composed of one or two hollow flower-leaves, holding the stamens and the pistil, and sheltering them from the rain. In the indigo plant the wings are sometimes joined together in the form of a carina, car or bark.

All the butterfly plants, including the indigo, have the habit of spreading out their wings in the day and folding them up at night. Linnæus discovered this fact in an interesting way: A friend having sent him some seeds of a butterfly-plant, he sowed them in his greenhouse, where they soon produced two beautiful flowers. His gardener having been absent when he first observed them, Linnæus went with a lantern in the evening to show them to him. But to his surprise they were nowhere to be found, and Linnæus was obliged to content himself by supposing that they had been destroyed by some accident or by insects. Great, however, was his astonishment next morning at finding his blossoms exactly where they had been the day before. Accordingly he took his gardener again in the evening to see them, and again they could not be found. Finding them once more, the following morning, looking as fresh as ever, his gardener said: "These cannot be the same flowers, they must have blown since." But Linnæus himself, not being so easily satisfied, re-visited

the plant as soon as it was dark, and, lifting up the leaves one by one, found the flowers folded under them, and so closely concealed as to be completely invisible at first sight. Led by this incident to observe other plants of the butterfly tribe, he found that they all, more or less, closed their wings at nightfall; and this fact formed the basis of his theory of the Sleep of Plants.

The seed-vessel of the indigo plant is like that of the common pea. Once sown in a loose and dark soil, the indigo plant requires no further care, until the time comes for cutting it. As the rainy season approaches, and the red butterfly blossoms begin to appear, the planter hastens to have it cut, for fear of the dye being washed away or spoilt by the inundations. In the month of July, parties of Hindûs may be seen in the indigo plantations in the upper provinces, clipping the bright green leaves and twigs to the level of the ground, followed by others who, picking up the plants as they are cut, bind them together and load them upon carts, while the planter passes through the fields, wearing a hat with a brim nearly as large as an umbrella, covered with white cloth, and comfortably perched in a houdah or car on the back of a huge elephant, whose neck is bestrode by a native mahout or driver armed with an iron rod.

From the fields the indigo is taken into a building called a vat, which is about thirty feet broad, and forty feet long. There are steps outside, leading to a platform within the building, from which a sort of immense bath is seen filled with the plant. Water being then let in from a reservoir, the indigo is allowed to ferment for about fourteen or sixteen hours. At the end of that time, the plant becoming entirely decomposed, and the water turning quite green, it is allowed to run into another building called a beating vat. A dozen natives, with scarcely any covering upon their bodies, and with their skins dyed blue—deeply and darkly, if not beautifully, blue—may be seen here, striking the liquid with long sticks, and making a sound like the splashing of oars in a river. When at work they shout and scream, as indeed they always do when trying to exert their strength. After having been beaten for about three or four hours, and the green liquor having become blue, just as our black blood becomes red from contact with oxygen of the air, it is left alone, to allow the sediment to settle at the bottom. The water is then gradually drawn off by taps fixed at equal distances in the sides of the vat, leaving a beautiful, soft, blue, pulpy matter, like very thick cream, on the floor. This blue cream is next boiled, until no froth or scum rises to the surface, and the blue cream looks as smooth as liquid glass. It is then poured into huge sieves, made by stretching

coarse cloth over wooden frames, through which the water strains off gradually, leaving the indigo of the consistency of cream-cheese. It is still, however, unfit for travelling to Calcutta, and from thence to all parts of the world. It must, therefore, be put into boxes with perforated bottoms, where every drop of moisture is finally squeezed out by mechanical pressure. The pressed indigo is then cut into cakes about three inches square, and is put into a drying-house, where it remains for three months.

The indigo is now fit for packing and travelling. It is truly astonishing to see the quantities of this paste, which are annually sent from Bengal, for the use of the painters and dyers distributed all over the globe. Indigo, however, is not only employed in dyeing blue, but is necessary for the production of almost every other color. The indigo plant in itself is perfectly harmless, while the indigo paste prepared from it is a rank poison. When rubbed with the finger nail, the paste assumes a copper color.

The smell of an indigo factory is very disagreeable; and the Hindús who work in it, besides having their bodies dyed of a dreadful color, are very meagre; yet they are contented with the work, and do it well.

An European indigo planter in the interior of India leads an isolated life, which, however, is not without its enjoyments. His business, though it has its anxieties, is not irksome. He is generally a farmer and a sportsman, and master and owner of a fine mansion, with plenty of elephants, Arabian horses, cows, sheep, goats, and dogs, and perhaps a few tame leopards and tigers. His elephants, besides being useful in enabling him to ride over his plantations, will carry him better than any other animal, when out in the jungles tiger-hunting. The planter often lives twenty or forty miles from any other European; but this does not prevent him from constantly making and receiving visits. Moreover, his time is well taken up with paying his people, superintending his vats, and settling disputes among the neighboring farmers. In his own district, the planter is perfectly independent, being looked up to with awe and respect by all around him. In their hour of trouble, the poor, miserable, hard-worked, and ill-fed ryots or laborers always fly to the British planter for protection against the oppressions of their own masters and countrymen.

One of the annoyances of a planter's life is the plague of flies. All over India, they are a great nuisance during the rainy season, but nowhere to such a degree as in the vicinity of an indigo factory; where they are attracted by the smell. When the servants are preparing the table for a meal, they put a white muslin cloth over the plates, cups and

saucers, and in an instant it is covered with black flies. Before taking off the muslin cloth, the bearer begins pulling the large heavy punkah or fan, which has generally a deep fringe at the edge of it; the waiters whisk about small fans in every direction to keep the flies from off the table; and as soon as the tea is poured out, a silver cover is put over the cup.

In the cold season, from November to March, the planter generally spends a month in one of the towns, for the purpose of negotiating the sale of his indigo.

One of the first records to be found of the commerce in indigo occurs in a letter addressed by Lord Bacon to King James, supporting some complaints made by the East India company, in which he says that in return for English commodities, we received from India great quantities of indigo. And a work, entitled the Merchant's Map of Commerce, published in sixteen hundred and thirty-eight by Lewis Roberts, says, we then exported from England a considerable quantity of indigo to Turkey and Italy. Davenant, in his Discourses on the Public Revenues and Trade, mentions some exports of indigo from America in sixteen hundred and eighty-two. About the year seventeen hundred and thirty-two, the indigo plant was extensively grown, and its produce exported from Jamaica and the sugar islands; nevertheless England was obliged to pay more than two hundred thousand pounds annually to France for indigo. Some Carolina rice-planters found they were overstocking the European market with rice, and began to cultivate indigo; and, in seventeen hundred and forty-seven, they sent nearly two thousand pounds of indigo to England. Parliament having granted a bounty of sixpence per hundredweight on all indigo grown in any of our American colonies and imported into England, the cultivation of the blue-dye plant continued to be pursued in Carolina with such success that, in about ten years, the export of indigo amounted to four hundred thousand pounds a-year.

The cultivation of the indigo plant is carried on at present in India, Egypt, and America; but the best indigo paste is manufactured in the Bengal Presidency. French, Germans, Italians, and the Arabs have all in turn tried to cultivate the indigo bearer in their own countries; and they have always failed, owing to the plant requiring a tropical climate for the production of the indigotine or blue coloring matter.

Respecting this precious chemical principle, the chemists tell us, that when a bit of indigo-paste is subjected to the influence of great heat, purplish vapors are seen rising from it, which, condensing upon cold bodies, form brilliant purple needles of indigotine.

From Chambers's Journal.

A "RAREY" SHOW.

WHEN glorious old Homer wanted an epithet with which to round off his description of a Hector or a Diomedes, he called the hero a "horse-conqueror," a "tamer of steeds"—a very different associations of ideas, it is true, from that of our modern hippodomos, or "horse-breaker." Setting aside the mere question of bone and muscle, about which no doubt much poetic licence is taken by bards in all ages, we must admit some differences as to the outer man. The glittering hemlet with nodding plumes of the noble Phrygian, Priam's best and bravest son must give place to an old battered felt, or wide-awake; the brazen plates and scales, to a greasy cast-off hunting-coat; while the seedy and blotchy "tops" finishing off no less seedy and blotchy "shorts" must stand instead of the graceful yet muscular limbs and picturesque greaves of the well-booted Grecians.

Still, with all his faults, the horse-breaker is, in the eyes of our youth, a heroic man. If we have seen a great, long-legged, slapping colt gamboling at liberty for four long years in the paternal pastures, since we first patted his nice little velvety nose as a newborn foal in the paternal paddock; if we have marked his growth, and trembled with the undulations of the soil as he has rushed past us, snorting indignation and contempt at our puny attempts to pen him up in a corner with no better force than half-a-dozen school-boys like ourselves; if this has been our previous experience in reference to "the colt," it cannot be but that the man who undertakes to bring this wild Bucephalus under the dominion of the saddle or collar, is, in our eyes, a great man, and no mistake. We know that there is danger to be encountered, exaggerated a thousand-fold by our boyish feelings and inexperience, and we feel that this illiterate, drunken old fellow can do something which any number of us would be quite unable to accomplish. Thus we exalt the crazy creature into the dignity of a hero, proving thereby that it is a fact intimately connected with the heroic side of man's character and history, that he has been able to subdue and render amenable to his purposes, in peace or war, this magnificent quadruped. A mature judgement would correct much of this impression, so far as it regards the personal danger attending the process; but the inveterately drunken habits of modern horse-breakers really do place their lives at times in imminent peril. There are also accidents to which even sober hippodomoi would be exposed under the present injudicious management—of which more anon—and I have myself known three generations

of them in the same family "killed off" in succession by broken necks, after fractures, bruises, and contusions innumerable had been surmounted. I suppose the experience of most persons who have lived in the country and been much "about horses," is somewhat similar.

It is certainly exciting to see a fine colt, such as I have introduced above, strapped up to the "german rider" (or dumb jockey), and trotting proudly round and round in the ring. Still more so is it if, after some days' "working him over the ground," the old crippled horse-breaker, probably after an encouraging "bit of lunch" in the servants' hall, thinks he will "just see and back him a bit this afternoon."

Up he gets on his, in our eyes, perilous eminence—Cardinal Wolsey himself was not in greater danger, *we* being the judges—and, after settling himself for some time, and giving little jerks of his body to let the horse know that he is *there*, the stalwart attendants lead him on a little, and then the word is given to "let him go!"

Sometimes this all ends peaceably enough, and we boys are rather disappointed than otherwise at seeing that no serious objection is made by the colt to his new burden; but it will happen that the old dingy spurs, which look as if they were rusted into the boots, have not been laid aside for the first "backing;" and as the "german rider" wears no spurs, this particular arrangement is quite unknown to the pupil. If, in such circumstances, a touch of the cold steel should be inadvertently given, there may be quite enough of trouble in the wind to satisfy even a school-boy's taste for the exciting and terrible. The surprised animal will then snort and plunge in a fearful manner, and use every effort to get rid of his tormentor; and in this he sometimes succeeds, to the damage of life or limb; but, more frequently, and if the ale has not been too strong, the tough muscles of the rider, long accustomed to exert their utmost tenacity in a particular direction, enable him to literally "ride out the storm." A struggle takes place like what we read of as occurring in the South American pampas, and goes on until the nobler animal gives way from sheer exhaustion, and exhibits a practical illustration of the old saying, "what can't be cured, must be indured;" and although it may be months before he can be depended on, yet he does in time submit, and put his shoulder to the collar, or yield his back to the saddle, in a wonderful manner; as showing that, in the long-run, intellect must gain the day against mere brute force. Still the "palm is not without dust." While the struggle goes on, the old fellow now lurches to one side, now rolls to the other; now he

seems as if he must go off over the head of the steed, and again as if he would capsize in the opposite direction; but, as I have said, the horse's struggles exhaust only himself, and leave the victory in the hands of all-subduing man.

As regards the general practice, it is quite deplorable to think of the needless barbarity with which this breaking-in process is conducted. The poor colt is—without being familiarised even for a day to a great bar of cold iron thrust across his mouth—sharply tied up to the “rider,” so as to excoriate his lips and gums, the result of which excoriation is a callosity quite fatal to our hopes of a good mouth, and rendering all the nuisances connected with the curb-chain indispensable; then he is incommoded with a crupper, excoriating another part; and then he is forced to go forward against opposing and painful pressures.

With a little gentle preparatory training, while young, all this could be greatly ameliorated, as I have often proved by experience. By accustoming the young animal to be handled, bitten, saddled, and led about, and avoiding high-feeding at the time of actual backing, I am satisfied that nearly all of this infliction of needless suffering can be done away with; not to speak of the saving of wear and tear of the animals themselves.

I shall never forget the regret and indignation I felt at seeing the stupid mismanagement of an old groom who was intrusted, many years ago, by a friend of mine, with the training of some very fine and valuable colts of his own breeding. They were, as I say, strikingly fine, promising, and high-bred animals, four years old, and full of high-feeding and courage. It was only to be expected that they should revolt most violently against the discipline of the bridle and saddle; and I saw plainly enough that the severe and constant “ringing” to which they were subjected each day, in order to tame them down to the point when they could be safely handled and mounted, and the long exercise on hard ground afterwards, *must*, of necessity, founder them in great measure, before they had “come in” for the master's use. I suggested, with all possible urgency, that if oats were altogether withheld for the time, and only a moderate share even of hay allowed them, all this unmerciful pounding of their young limbs upon hard ground—for at that time the green fields were even worse for them than the high road itself—might be avoided. I was, however, met by derision, and told, in good set-terms, that I knew nothing about the matter; that you never “can be sure of a horse, unless you bring him in in his full spirit,” &c. The result was, that the best and most valuable hunters

of that “lot” were prematurely “cast off,” because they had no “fore-legs” at seven years of age. At that very period I adopted what was derisively called the “starving system,” with two young animals of about the same sort, but less valuable on some accounts; and with perfect success. One of them I sold while young; the other I used as a “ride-and-drive” horse for eleven years, and gave him to a friend, at fourteen or fifteen, as sound on his legs as ever, after a life of real, although fair, work on hard roads, both in saddle and harness.

A vast amount of useless wear and tear might, I am fully convinced, be thus saved, and most young horses would come to their work unfounded, by such a gentle and judicious system of management as I have suggested—but chiefly by low-feeding at the critical period. There are, however, vicious brutes—some born such, and some rendered dangerous by improper treatment—the breaking-in of which has always been a matter of infinite trouble and difficulty. A friend of mine once bought, for a mere song, a high-bred and beautiful colt which it was found impossible to bridle. He paid the money, asked for the key of the stable, put it in his pocket, and rode home; taking care that all food, except some dirty litter, was removed. Thus twenty-four hours were suffered to elapse, and then he came again, provided himself with a handful of oats in a sieve, entered the stable, and while the famished animal was greedily feeding on the corn, he slipped the bridle into his mouth and over his ears, and led him away in triumph. I need hardly observe that the bridle was left on for a time, and by the adoption of moderate means and low-feeding, this “vicious” horse was soon tamed, and subsequently sold for a high price.

Every one has heard of Sullivan the Irish “Whisperer,” who stood alone in his day in the possession of some secret, known only to himself and the subjects on which he operated, and by which he most undoubtedly succeeded in taming, in a few hours, the most refractory horses submitted to the trial. A graphic instance of this is given in Mr. Youatt's book, *The Horse*, on the authority of an eminent veterinary surgeon of Dublin, who witnessed the scene.

The subject of this experiment was a celebrated racer called King Pepin. This horse was sometimes dangerously vicious; and on one particular day, when he was engaged to run on the “Curragh,” he would let no one into the stable to put a bridle upon him. A great lumbering country fellow volunteered to do this, but his enraged majesty seized him by the back with his teeth, and shook him like a terrier shaking a rat. Fortunately,

like all his countrymen who have it in their power to do so, this daring individual had put on as many coats as he could well carry; so that while the king thought, no doubt, he was paying off the man, he got only a mouthful of coarse gray frieze before reaching the actual skin, of which latter he scarcely had more than a superficial hold with his teeth; and Paddy, in addition to being laughed at, got off with a severe pinch and a sad damage to his holiday toggery.

As Sullivan was known to be on the spot, he was sought out, and at his own request, shut up with the indignant monarch; in about an hour he appeared on the open course, followed about by King Pepin, as a dog follows his master; and the horse lay down, got up again, and suffered himself to be handled all over at the bidding of this rude ignorant rustic (for such he was), to the infinite astonishment of a crowd of bystanders.

Of course, the "Whisperer" could have made a fortune if he had chosen; but he contented himself with a moderate scale of earnings, just sufficient to enable him to enjoy his favorite pastime of meeting with the Suhallow hounds. The curious fact connected with him is, that he could not communicate his secret even to his son; after his death, the latter often attempted to exercise his father's calling, but the endeavor was a complete failure.

Thus the matter of horse-conquering remained for many years, no one appearing to have caught old Sullivan's secret, or invented a method for himself. But, within the last few months, the case has been otherwise; and an American hippodamus, or horse-tamer has fully equalled, if not eclipsed, the renown of the sorcerer from far Suhallow.

It would seem that this now celebrated Columbian, whose name is Rarey, has been completely successful in taming every sort of vicious and dangerous horse on which he has exercised his skill here in England; while more recently, in France, he has outdone even himself. It would seem that a horse belonging to the imperial *baras*, or breeding-grounds, had been so mischievous that its destruction had been at last determined upon. This impracticable beast was brought to the Parisian Tattersall's, blindfolded, and encumbered in all possible ways to prevent mischief: Mr. Rarey was closeted with him for a few hours, and then appeared riding on his back, in the midst of the astonished spectators! The horse was perfectly docile and gentle, although previously he had bitten the legs of all who mounted him. The sight of a whip put him in a fury, but now he allowed one to be cracked over his ears, and a drum to be beaten on his back, without exhibiting the least sign of impatience or apprehension.

This extraordinary spectacle I have ventured to introduce to my readers as a "Rarey Show;" and I am persuaded that, while they pardon a very bad pun, they will agree with me in thinking that such an exhibition as this beats the old "Raree Show" on Lord-mayor's Day all to shivers.

As it now appears that this wonderful gift is not a mere accident attendant on some peculiarity in an individual man, and incommunicable to others, as in the case of the ancient "Whisperer," but a science, based upon a given principle, and capable of explanation upon a reference to known laws of the natural world, it seems to deserve a place in the records of scientific discovery.

I observe by the advertising sheet of the *Times*, that an Englishman, calling himself the "Horse-tamer," offers to show his method to a certain number of subscribers at a guinea each; while the *Boston Journal* (U. S.) professes to disclose gratuitously Mr. Rarey's secret, which consists, it tells us, of the use of certain rubs and drugs administered in the following manner: "Procure some horse-castor, and grate it fine; also get some oil of Rhodium and oil of cumin, and keep the three separate in air-tight bottles. Rub a little oil of cumin upon your hand, and approach the horse in the field, on the windward side, so that he can smell the cumin. The horse will let you come up to him then without any trouble. Immediately rub your hand gently on the horse's nose, getting a little of the oil on it. You can lead him any where. Give him a little of the castor on a piece of loaf-sugar or potato. Put eight drops of oil of Rhodium into a lady's silver thimble. Take the thimble between the thumb and middle finger, stopping the mouth of the thimble to prevent the oil from running out whilst you open the mouth of the horse. As soon as you have opened the horse's mouth, tip the thimble over upon his tongue, and he is your servant. He will follow you like a pet dog. He is now your pupil and your friend. You can teach him anything, only be kind to him, be gentle. Love him and he will love you. Feed him before you do yourself. Shelter him well; groom him yourself, keep him clean, and at night always give him a good bed at least a foot deep."

The horse-castor mentioned here is an excrescence growing on the fore-legs, and frequently the hind-legs, of all horses: it has a strong ammoniac odor, and is attractive to other animals as well as the horse. The oil of Rhodium exercises a subduing influence over all animals; and for the oil of cumin the horse has an instinctive passion.

Speaking as one who has seen much of what is called "horseflesh," and studied what may be termed the psychology of the animal

creation with some attention, I confess I am lost in astonishment at what is now brought to light in reference to this horse-taming business. The horse is far from being endowed with much sagacity in a general way. But, admitting that a normal horse can, with very laborious training, be taught those tricks which are shown in the "horse-riderings" of our country, it is still a wondrous thing to me to think of old and established *vicious habits*—the habitual temper and disposition of years—removed by a few hours more or less, of secret conference with another being of a totally different species, with whom there can be no direct interchange of thought or language—even in the low and limited sense in which this is possible as between the ordinary horse and his habitual trainer—and whom he must look upon, in the first instance, as one of those very creatures whom, for years, perhaps, he has been setting at defiance, resisting successfully in their attempts to get the better of him, and regarding with feelings of mingled contempt and aversion. All this does, I confess, fill me with a degree of astonishment which I find it impossible to express in words; and which, I venture to say, will be shared in by others, just in proportion as they may have been close and attentive students of natural history, and patient observers of the habits, and, if one may so call them, the moral feelings of the

lower animals. An entire reformation of this sort brought about without violence or any bewildering effect upon the senses of the subject, must be allowed on all hands to be a thing altogether *sui generis*, and without a parallel in any other branch of the treatment of animals by their natural master.

It is impossible not to wish that some attempts should be made upon other beasts, with a view of testing the powers of this wonder-working system. We might more especially desire to see what it could do with other creatures of the genus *equus*, hitherto untamable.

Let any one observe the behavior of the zebra in the Regent's Park, his restless desire to gnaw through the bars of his prison, and the savage way in which he receives any advances to kindness on the part of visitors; reflecting upon the fact, that, while his congener the quagga, is tamed with tolerable facility, the beautiful zebra has as yet successfully rebelled against man's dominion; let any one, I say, reflect upon all this, and I think he will agree that a most interesting field is here open for the talent of our modern horse-tamers!

It would be exceedingly curious if it should turn out in the end that the *horse* is the only quadruped, even in his own genus, susceptible of being brought under this wonderful influence, whatever it may be.

FAIRIES are about in the night. Londoners are waking of a morning in streets the very names of which are unknown to them; and the Post-Office or the Vestries call this pantomime by the taking title of Reform. Softly, softly, good Genius! Here is a good work to be done, and good work requires to be done sagely and cautiously. Some nations write their histories—some their politics—in their streets. A people with a slow growth and a long life (like we English) accumulate names, as they store up facts. A people of rapid growth—with no past and no future (say, like the French)—are perpetually blotting out and beginning afresh. We stick to our King Edward Streets, they glory in Rue Lamartines. Tower Hill has been Tower Hill for a thousand years. Place de la Concorde, if this be still the name, has been Place Louis-Quinze, Place de la Révolution, Place de la Guillotine, Place Napoléon, Place Louis-Quinze again, Place de la Concorde, Place de la Révolution again, and now Place de la Concorde again. A traveller stopping for a day at Amboise, on a tour through sunny Touraine, may read the changes of French times and seasons at the street corners,—Rue St. Claudés

blotted over with Rue Voltaire, in anticipation, we infer, of coming events. Now we don't often do this sort of trick; but we must do it sometimes; and when we do it once for all, let us do it well and graciously. Our historical accumulations are in the way of express trains and telegraphs. Our sixty-two George Streets, our fifty-five Charles Streets, our forty-four King Streets, our thirty-eight Queen Streets, impede the march of metropolitan life. They must give way. But the thing to be touched is in some degree sacred—as the Romans held it—for the marks to be effaced are boundaries, traditions, memories, histories. Of course, under learned counsel, the necessary changes may be so made as to preserve what is good, and do some justice in the changes. For instance, we shall all rejoice to see a Charles Street give place to a Shakspeare Street—a King Street to a Pope Street—a York Place to a Jerrold Place, as is proposed. We like the idea of substituting popular names, dead and living, for the absurd nomenclature of accident; and if fitness and association be observed in the substitution, the public will assuredly applaud these changes,—*Athenæum*.

From Household Words.

LOST ALICE.

CHAPTER THE FIRST.

WHY did I marry her? I often asked myself the question, in the days that succeeded our honeymoon. By right, I should have married no one. Yet I loved her, as I love her still.

She was, perhaps, the strangest character of her age. In her girlhood, I could not comprehend her; and I often think, when I raise my eyes to her grave, quiet face, as she sits opposite me at dinner, that I do not comprehend her yet. There are many thoughts working in her brain of which I know nothing, and flashes of feeling look out at her eyes now and then, and go back again, as captives might steal a glimpse of the outer world through their prison bars, and turn to their brick-walled solitude once more. She is my wife. I have her and hold her as no other can. She bears my name, and sits at the head of my table; she rides beside me in my carriage, or takes my arm as we walk; and yet I know and feel, all the time, that the darling of my past has fled from me for ever, and that it is only the ghost of the gay Alice, whom I won in all the bloom of her bright youth, that lingers near me now.

She was not a child when I married her, though she was very young. I mean, that life had taught her lessons which are generally given only to the grey-haired, and had laid burdens upon her which belong of right to the old. She had been an unloved child, and at the age of sixteen she was left to herself, and entirely dependent on her own exertions. Friends and family she had none, so she was accustomed laughingly to say; but I have since found that her sisters were living, and in happy homes, even at the time when she accepted that awful trust of herself, and went out into the great world to fulfil it. Of this part of her life she never speaks; but one who knew her then has told me much. It was a time of struggle and pain, as well it might have been. Fresh from the life of a large boarding-school, she was little fitted for the bustle of a great selfish city; and the tears come to my eyes as I think, with a kind of wonder, on the child who pushed her way through difficulties at which strong men have quailed, and made herself a name, and a position, and a home. She was a writer,—at first a drudge, for the weekly press, poorly paid, and unappreciated. By-and-by, brighter days dawned, and the wolf went away from the door. She was admired, read, sought after, and—above all—paid. Even then, she could not use the wisdom she had purchased at so dear a rate. She held her heart in her hand, and it was wrung and tortured every day.

"I may as well stop breathing as stop loving," she would say, with a happy smile. "Don't talk to me about my folly. Let me go on with my toys; and, if they break in my hand, you cannot help it, and I shall not come to you for sympathy."

She was not beautiful; but something—whether it was her bright, happy face, or the restless gaiety of her manner—bewitched people, and made them like her. Men did the maddest things imaginable for her sake; and not only young men in whom folly was pardonable, but those who should have been too wise to be caught by the sparkle of her smile, or the gay ringing of her laugh. She did not trust them; her early life had taught her better; but I think she liked them for awhile, till some newer fancy came, and then she danced past them, and was gone.

It was in the country that I met her first; and there she was more herself than in the city. We were distant relatives, though we had never seen each other, and the Fates sent me to spend my summer vacation with my mother's aunt, in a country village, where she was already domesticated. Had I known this, I should have kept my distance; for it was only a fourteenth or fifteenth cousinship that lay between us, and I had a kind of horror of her. I hardly knew why. I was a steady-going, quiet sort of lawyer, and hated to have my short holiday of rest and quiet broken in upon by a fine lady. I said as much to my aunt, in return for her announcement of "Alice Kent is here," with which she greeted me. She looked over her spectacles in quiet wonder as I gave her a slight sketch of the lady's city life, as I had had it from the lips of "Mrs. Grundy" herself.

"Well—live and learn, they say. But whoever would think it was our Alice you are talking of, Frank! However, I'll say no more about her! You'll have plenty of time to get acquainted with her, in the month you mean to pass here. And we are glad to see you, and your bed-room is ready,—the one you used to like."

I took up my hat, and strolled away to have a look at the farm. By-and-by, I got over the orchard wall, and crossed the brook, and the high road, and went out into the grove behind the house, whose farthest trees were growing on the side of the hill which looked so blue and distant from my chamber window. It was an old favorite place of mine. A broad wagon track led through the woods, out to a clearing on the other side, where was a little sheet of water, called The Fairy's Looking-glass, and a beautiful view of a lovely country, with the steep green hills lying down in the distance, wrapped in a soft fleecy mantle of cloud and haze. I could think of nothing, when I stood there, on a fine

sunshiny day, but the long gaze of Bunyan's Pilgrim through the shepherd's glass, at the beautiful city towards which he was journeying. And it seemed sometimes as if I could wander "over the hills and far away," and lose myself in one of the fair valleys at the foot of those hills, and be content never to come out and face the weary world any more.

I walked slowly through the woods, with the sunshine falling through the green leaves of the young beeches in chequered radiance on my path, drawing in long breaths of the fresh air, and feeling a tingling in my veins and a glow at my heart, as if the blood were flowing newly there, until I came to the little circular grove of pines and hemlocks that led out upon the Fairy's Looking-glass. Something stirred as I pierced my way through the branches, and I heard a low growl.

A girl was half-sitting, half-lying, in the sunshine beside the little lake, throwing pebbles into the water, and watching the ripples that spread and widened to the other shore. A great black Newfoundland dog was standing between me and her, showing a formidable row of strong white teeth, and looking me threateningly in the face.

She started, and looked sharply round, and saw me standing in the little grove with the dog between us. She burst out laughing.

I felt that I was cutting rather a ridiculous figure, but I put a bold face upon the matter, and asked coolly,

"Are you Alice Kent?"

"People call me so."

"Then I suppose I may call you cousin, for I am Frank Atherton?"

"Cousin Frank! We have been expecting you this week. When did you come?"

"Just now."

She made room for me beside her. We talked long, about our family, our mutual friends, and the old homestead of the Athertons, which she had seen, though I had not. She told me about the house, and our cousins who were then living there, and I sat listening, looking now and then at her, as she sat with the sunshine falling round her, and the great dog lying at her feet. I wondered, almost as my aunt had done, if this was indeed the Alice Kent of whom I had heard so much. She was dressed plainly, very plainly, in a kind of grey material, that fell around her in light soft folds. A knot of plain blue ribbon fastened her linen collar, and a gipsy hat, lying beside her, was trimmed with the same color. Her watch chain, like a thread of gold, and a diamond ring, were the only ornaments she wore. Yet I had never seen a dress I liked so well. She was tall (too tall, I should have said, had she been any one else; for, when we were standing, her head was almost on a level with mine) and slender,

and quick and agile in all her movements. Her brown hair was soft and pretty, but she wore it carelessly pushed away from her forehead: not arranged with that nicety I should have expected in a city belle. Her features were irregular, full of life and spirit, but decidedly plain: her complexion fair, her mouth rather large, frank and smiling, her eyebrows arched, as if they were asking questions; and her eyes large, and of a soft dark grey, very pleasant to look into, very puzzling too, as I found afterwards to my cost. Those eyes were the only beauty she possessed, and she unconsciously made the most of them. Had she been a Carmelite nun, she would have talked with them: she could not have helped it. When they laughed, it seemed their normal state—the bright beaming glance they gave; but, when they darkened suddenly and grew softer and deeper, and looked up into the face of any unfortunate wight with an expression peculiarly to themselves, heaven help him!

Though I had known her only five minutes, I felt this, when I chanced to look up and meet a curious glance she had fixed on me. She had ceased to talk, and was sitting, with her lips half apart and a lovely color mantling on her cheek, studying my face intently, when our eyes met. There was an electric kind of shock in the gaze. I saw the color deepen and go up to her forehead, and a shiver ran over me from head to foot. It was dangerous for me to watch that blush, but I did; and I longed to know its cause, and wondered what thought had brought it.

"Fred, bring me my hat," she said to her dog, affecting to yawn. "It is time for us to go home to supper, I suppose. Are you hungry, cousin Frank?"

"Yes—no," I answered, with my thoughts still running on that blush.

She laughed good-naturedly, and took the hat from the Newfoundland, who had brought it in his mouth.

"How fond you are of that great dog," I said, as we rose from our seat beneath the tree.

"Fond of him?" She stooped down over him with a sudden impetuous movement, took his head between her two hands, and kissed the beauty-spot on his forehead. "Fond of him, cousin Frank? Why, the dog is my idol! He is the only thing on earth who is or has been true to me, and the only thing—" She stopped short, and colored.

"That you have been true to," I said, finishing the sentence for her.

"So people say," she answered, with a laugh. "But look at him—look at those beautiful eyes, and tell me if any one could help loving him. My poor old Fred! So honest in this weary world."

She sighed, and patted his head again, and he stood wagging his tail and looking up into her face, with eyes that were as she had said, beautiful, and what was better far, brimful of love and honesty.

"I doubt if you will keep pace with us," she said, after we had walked a few steps; "and Fred is longing for a race; I always give him one through the woods. Would you mind?"

"Oh dear, no!"

The next moment she was off like the wind, and the dog tearing after her, barking till the woods rang again. I saw her that night no more.

CHAPTER THE SECOND.

I WAS, as I have already said, a grave, steady-going lawyer, verging towards a respectable middle age, with one or two gray hairs showing among my black locks. I had had my dreams and fancies, and my hot, eager, generous youth, like most other men; and they had passed away. But one thing I had not known, one thing I had missed (save in my dreams), and that was a woman's love.

If I ever gave my visions a body and a name, they were totally unlike all the realities I had ever seen. The wife of my fireside reveries was a slight, delicate, gentle creature, with a pure pale face, sweet lips, the bluest and clearest of eyes, the softest and finest of golden hair, and a voice low and sweet, like the murmurings of an *Æolian* harp. And she sat by my chair in silence; loving me always, but loving me silently, and her name was Mary. I dare say, if I had met the original of this placid picture in life, I should have wooed and won her, and have been utterly miserable.

So, as a matter of course, I fell into danger now. When Alice Kent went singing and dancing through the house, leaving every door and window open as she went, I used often to lay down my pen and look after her, and feel as if the sun shone brighter for her being there. When she raced through the grove or orchard with the great dog at her heels, I smiled, and patted Fred on the head: when she rode past the house at a hand gallop on her gray pony, *Fra Diavolo*, and leaped him over the garden gate, and shook her whip saucily in my face, I laid aside my book to admire her riding, and never thought her unwomanly or ungraceful.

We grew to be great friends—like brother and sister, I used to say to myself. How that liking glided gradually into loving, I could not have told. I met her one day in the village street. I turned a corner, and came upon her suddenly. She was walking slowly along, with her dog beside her, and her eyes fixed upon the ground, looking graver and

more thoughtful than I had ever seen her before. At sight of me her whole face brightened suddenly; yet she passed me with a slight nod and a smile, and took her way towards home. Seeing that flash of light play over her grave face, and feeling the sudden bound with which my heart sprang up to meet it, I knew what we were to each other.

It was late when I reached home, after a musing walk. The farmer and his wife had gone to bed, the children were at a merry-making at the next house, and a solitary light burned from the parlor window, which was open. The full moon shone fairly in a sky without a cloud. I unfastened the gate and went in; and there in the open door sat Alice, with a light shawl thrown over her shoulders, her head resting on the shaggy coat of the Newfoundland dog. His beautiful brown eyes watched me as I came up the path, but he did not stir.

I sat down near her; but on the lower step, so that I could look up in her face.

"Alice, you do not look well."

"But I am. Quite well. I am going away to-morrow."

"Going away! Where?"

"Home. To London. Well? What ails you, cousin Frank? Did you never hear of any one who went to London before!"

"Yes: but why do you go?"

"Why?" She opened her eyes and looked at me. "For many reasons. Firstly, I only came for six weeks, and I have stayed nearly three months; secondly, because I have business which can be put off no longer; and thirdly, because my friends are wondering what on earth keeps me here so long (they will say soon, it is you, Frank). They vow they cannot do without me any longer, and it is pleasant to be missed, you know."

"And so you are going back to the old life, Alice? And by-and-by I suppose you will marry?"

I would not advise any man, be he old or young, in case he does not think it wise or prudent to marry the woman he loves, to linger with her in the doorway of a silent farmhouse, and hold her hand, and look out upon a moonlight night. The touch of the small slight fingers was playing the mischief with my good resolutions, and my wisdom (if I had any).

"Alice," I said, softly; and I almost started, as she did at the sound of my own voice, it was so changed. "Alice, we have been very happy here."

"Very."

I took both her hands, and held them close in mine. But she would not look at me, though her face was turned that way.

"There is a great difference between us,

dear Alice. I am much older than you, and much graver. I have never loved any woman but you in my life, while you have charmed a thousand hearts, and had a thousand fancies. If you were what the world thinks you, and what you try to make yourself out to be, I should say no more than this—I love you. But I know you have a heart. I know you can love, if you will; and can be true, if you will. And so I beseech you to talk to me honestly, and tell me if you can love me, or if you do. I am not used to asking such questions of ladies, Alice, and I may seem rough and rude; but believe me, when I say you have won my whole heart, and I cannot be happy without you."

"Yes, I believe you," she said.

"But do you trust me, and do you love me?"

She might trifle with a trifter, but she was earnest enough with me.

"I trust you, and I love you," she answered, frankly. "Are you wondering why I can stand before you, and speak so calmly? Because, I do not think I shall ever marry you. You do not love me, as I have always said my husband should love me. I am wayward and exacting, and I should weary your life out by my constant craving for tenderness. I was made to be petted Frank; and you, though a loving, are not an affectionate man. You would wish me at the bottom of the Red Sea before we had been married a month; and, because you could not get me there, you would go to work and break my heart, by way of amusement. I know it as well as if I had seen it all—even now."

She looked at me, and all her woman's heart and nature were in her eyes. They spoke love and passion, and deep, deep tenderness—and all for me. Something leaped into life in my heart at that moment which I had never felt before—something that made my affection of the last few hours seem cold and dead beside its fervid glow. I had her in my arms within the instant—close—close to my heart.

"Alice! if ever man loved woman with heart and soul—madly and unreasonably if you will, but still truly and honestly—I love you, my darling."

"But will it last? O, Frank, will it last?"

I bent down, and our lips met in a long, fond kiss.

"You will be my wife, Alice?"

She leaned her pretty head against my arm, and her hand stole into mine again.

"Do you mean that for your answer? Am I to keep the hand, dear Alice, and call it mine?"

"If you will, Francis."

It was the first time she had ever given me that name. But she never called me by any other again until she ceased to love me; and it sounds sweetly in my memory now, and it will sound sweetly to my dying day.

CHAPTER THE THIRD.

We were married not long after, and for six months we dwelt in a "Fool's Paradise." When I think, that but for me, it might have lasted to our dying day, I can only sigh, and take up the burden of my life with an aching heart.

They had called Alice fickle—oh, how wrongly! No human being could be truer to another than she was to me.

"I only wanted to find my master, Francis," she used to say, when I laughed at her about it. "I was looking for him through all those long years, and I began to think he would never come. But, from the first moment when I heard you speak, and met your eyes, I felt that he was near me. And I am glad to wear my master's chains," she added, kissing my hand.

And I am sure she was in earnest. I pleased her best when I treated her most like a child. She was no angel—a passionate, high-spirited creature. She rebelled a thousand times a day, although she delighted in my control. But it was pretty to see her, when she turned to leave the room, with fire in her eyes, and a deep flush on her cheek—it was pretty to see her with her hand upon the lock even, drop her proud head submissively, and wait when I said—"Stop. Shut the door and listen to me." Yet it was dangerous. I, who had never been loved before, what could I do but become a tyrant, when a creature so noble as this bent down before me!

She loved me. Every chord of her most sensitive heart thrilled and trembled to my touch, and gave forth sweetest music; yet I was not satisfied. I tried the minor key. Through her deep affection for me I wounded her cruelly. I can see it now. Some wise idea found its way into my head and whispered that I was making a child of my wife by my indulgent ways, and that her character would never develop its strength in so much sunshine. I acted upon that thought, forgetting how she had already been tried in the fiery furnace of affliction; and, quite unconscious, that while she was getting back all the innocent gaiety of her childish years, the deep lessons of her womanhood were still lying beneath the sparkling surface of her playful ways.

If, for a time, she had charmed me out of my graver self, I resolved to be charmed no more. I devoted myself again to my business, heart and soul, and sat poring for hours

over law papers without speaking to her. Yet she did not complain. So long as she was certain that I loved her, she was content, and took up her pen again, and went on with the work our marriage had interrupted. Her writing-desk was in my study, by a window just opposite mine; and sometimes I would cease to hear the rapid movement of her pen, and, looking up, I would find her eyes fixed upon my face, while a happy smile was playing around her lips. One day the glance found me in a most unreasonable mood. The sense of her love half pained me, and I said curtly:

"It is bad taste, Alice, to look at any one in that way."

She dropped her pen, only too glad of an excuse to talk to me, and came and leaned over my chair.

"And why? when I love some one."

This was a bad beginning of the lesson. I wanted to teach her, and I turned over my papers in silence.

"Do I annoy you, Francis?"

"Not much."

Her light hand was playing with my hair, and her breath was warm on my cheek. I felt my wisdom vanishing, and tried to make up for its loss by an increased coldness of manner.

"One kiss," she said. "Just one, and I'll go away."

"What nonsense, Alice. What time have I to think of kisses now?"

She stood up and looked me in the face.

"Do I tease you, Francis?"

"Very much."

She gave a little sigh—so faint that I could scarcely hear it—and left the room. I had scared her gaiety away for that morning.

This was the first cloud in our sky.

It seems strange, now, when I look back upon it after the lapse of years, how perseveringly I labored to destroy the foundation of peace and happiness on which I might have built my life. The remaining six months of that year were months of misery to me, and, I doubt not, to Alice, for she grew thin and pale, and lost her gaiety. I had succeeded only too well in my plan, and she had learned to doubt my affection for her. I felt this by the look in her eyes now and then, and by the way in which she seemed to cling to her dog, as if his fidelity and love were now her only hope. But I was too proud to own myself in the wrong, and the breach widened day by day.

In the midst of all this estrangement the dog sickened. There was a week of misgiving on Alice's part, when she sat beside him with her books, or writing all the time—there was a day when both books and manuscript were put away, and she was bending over him,

with tears falling fast, as she tried to hush his moans, and looked into his fast glazing eyes—and there was an hour of stillness, when she lay on the low couch, with her arm around his neck, neither speaking nor stirring. And when the poor creature's last breath was drawn, she bent over him with a passionate burst of grief, kissed the white spot upon his forehead, and closed the soft, dark eyes, that even in death were turned towards her with a loving look.

She did not come to me for sympathy. She watched alone, while the gardener dug a grave and buried him beneath the study window. She never mentioned him to me, and never paid her daily visit to his grave till I was busy with my papers for the evening. So the year, which had begun in love and happiness, came to its close.

I sat in the study alone, one morning in the February following, looking over some deeds that had been long neglected, when I heard Alice singing in the balcony outside the window. It was the first time I had heard her sing since Fred's death, and I laid down my pen to listen. But hearing her coming through the hall, I took it up again, and affected to be very busy.

It was a warm, bright, beautiful day, and she seemed to bring a burst of sunlight and happiness with her as she opened the door. Her own face, too, was radiant, and she looked like the Alice of the old farm-house, as she came on tiptoe and bent over my chair.

"Well, what is it?" I asked, looking up.

She laid a pretty little bouquet of violets, tied with blue ribbons, before me.

"I have been to the conservatory, and have brought you the first flowers of the season, Francis. And something else, which, perhaps, you may not like so well."

She bent over me as she spoke, and leaning her hand lightly on my shoulder, kissed me twice. She had been chary of her caresses, for some time; and, when she did this of her own accord, I wheeled round in my chair, and looked up at her.

"You seem very happy, to-day, Alice."

"It is somebody's birthday," she said, stationing herself upon my knee, and looking into my eyes. "And I wish somebody very many happy returns:"—her voice faltered a little—"and if there has been any wrong feeling, Francis, for the last six months, we will bury it to-day, now and forever."

She clung to me in silence, and hid her face upon my breast. I was moved, in spite of myself, and kissed the brown hair that was scattered over my shoulder, and said I was quite willing to forget everything (as if I had anything to forget)! At which she looked up with a bright smile, and I daresay thought me very magnanimous.

"And we will make a new beginning from this day, Francis."

"If you will, my child."

She caressed me again, after a queer little fashion of her own, which always made me smile, and which consisted of a series of kisses bestowed systematically on different parts of my face—four, I believe, being allotted to my forehead, two to each cheek, two the chin, four to my lips, and four to my eyes. She went through this ceremony with a painstaking care, and then looked me in the face. All her love and tenderness seemed to come up before me in that moment, and efface the past and its unhappiness. I held her closely to my heart, and her arms were around my neck.

Will any one believe it? My wife had scarcely left me five moments before the fancy came to me that I had shown too plainly the power she had over me. For months I had been schooling myself into coldness and indifference, and at her very first warm kiss or smile, I was completely routed. She had vexed, and thwarted, and annoyed me much during those months: it would not do to pardon her so fully and entirely before she had even asked my forgiveness. I took a sudden resolution; and, when she came back into the room, was buried in my papers once more. Poor child! She had had one half-hour's sunshine, at last.

"One moment," she said, taking the pen out of my hand, and holding something up over my head. "I have a birthday gift for you. Do you want it?"

"If you give it to me, certainly."

"Then ask me for it."

I said nothing, but took up my pen again. Her countenance fell a little.

"Would you like it?" she said, timidly.

"There was a saint in old times," I said, quietly, going on with my papers, "a namesake of mine, by the way—Saint Francis of Sales—who was accustomed to say, that one should never ask or refuse anything."

"Well! But I'm not talking to *Saint* Francis; I am talking to you. Will you have my little gift? Say yes—just to please me—just to make my happy day still happier."

"Don't be a child, Alice."

"It is childish, I know; but indulge me this once. It is such a little thing, and it will make me very happy."

"I shall not refuse whatever you choose to give me. Only don't delay me long, for I want to go on with these papers."

The next moment she threw the toy (a pretty little bronze inkstand made like a Cupid, with his quiver full of pens) at my feet, and turned away, grieved and angry. I stooped to pick up the figure—it was broken in to.

"Oh, you can condescend to lift it from the ground!" she said sarcastically.

"Upon my word, Alice, you are the most unreasonable of beings. However, the little god of love can be easily mended."

"Yes."

She placed the fragments one upon the other and looked at me.

"It can be mended, but the accident must leave its trace, like all others. Oh, Francis!" she added, throwing herself down by my chair, and lifting my hand to her lips. "Why do you try me so? Do you really love me?"

"Alice," I said, impatiently, "do get up. You tire me."

She rose and turned very pale.

"I will go then. But first answer my question. Do you love me, Francis?"

I felt anger and obstinacy in my heart—nothing else. Was she threatening me?

"Did you love me when you married me, Francis?"

"I did. But——"

"But you do not love me now?"

"Since you will have it," I said.

"Go on!"

"I do not love you—not as you mean."

There was a dead silence in the room as the lying words left my lips, and she grew so white, and gave me such a look of anguish that I repented of my cruelty, and forgot my anger.

"I did not mean that, Alice," I cried. "You look ill and pale. Believe me, I was only jesting."

"I can bear it, Francis. There is nothing on this earth that cannot be borne—in one way or other."

She turned and left the room, quietly and sadly. The sunshine faded just then, and only a white, pale light came through the window. I so connected it with her sorrow, that to this day I can never see the golden radiance come and go across my path, without the same sharp, knife-like pang that I felt then, as the door closed behind her.

CHAPTER THE FOURTH.

ALICE became weaker and grew really ill. A tour on the continent was strongly recommended by the doctors as the likeliest means of restoration. It was impossible for me to go; but some friends of ours, one Mr. and Mrs. Warrener, with a young daughter, were going to Italy for six months, and it was arranged that Alice should accompany them.

They remained abroad, nine months instead of six. People wondered and joked about my wife's deserting me; but I only laughed, and said, I should soon go after her if she remained away much longer; and they thought we were still a model couple. But,

had they seen me sitting in my office, at night, over Alice's letters from abroad, they would have known what a gulf had opened between us two. I read those letters over and over again, with aching throbs going through and through my heart, at every word. They were full of incident and interest, and people called them beautiful, who had not seen the mixture of womanly passion and childlike playfulness in her character that I had seen, and which I was to see no more.

At last she returned. I came home tired enough, one evening, to find a letter lying on my table, informing me that she would cross to Dover on the morrow. I went down to Dover to meet her. Our estrangement had worn deep into my heart. She had loved me once; she should love me again!

I was worn, haggard. I took a bath and made a careful toilet after my hurried journey. As I was taking my last look in the glass, the hotel-waiter came to tell me they had arrived.

I followed him, more nervous than I had ever been before in my life. Warrener grasped my hands as I opened the door, and Mrs. Warrener—bless her kind heart!—burst out crying.

"Oh, my dear Frank! I am so glad to see you. And we have brought you your Alice home, so well."

Next moment she entered, a little King Charles' spaniel frisking about her feet. I had her in my arms at once, but it was not until she kissed me that I knew how cold and pale she was.

"Alice, are you ill?" I asked, holding her away from me, and looking into her face.

Her eyes met mine, but their old light was quite gone.

"Not in the least ill, Frank," she said quietly. But you must remember I have not seen you for nine months and you startled me a little."

My household fairy had fled, and I could only mourn that I should never look upon her sweet, young face again. It was another Alice, this. I had slain my own Alice, and nothing could reanimate her.

I was like one in a dream all through the day; and, when we came home, I could not wake. I had made many changes in the house, and all for her. I took her through the rooms on the day after our return, and showed her the improvements. She was pleased with the furniture; she admired the pictures and the conservatory; and seemed delighted with the little gem of a boudoir which I had pleased myself by designing expressly for her. She thanked me, too. No longer ago than a year, she would have

danced through the rooms, uttering a thousand pretty little exclamations of wonder and delight, and I should have been smothered with kisses, and called "a dear old bear," or some such fit name at the end; all of which would have been very silly, but also very delightful.

I think I bore it for a month; but one morning, as I sat at my solitary breakfast—for Alice took that meal in her room now—the bitter sense of wrong and unhappiness and desertion came over me so strongly that I went up to her room.

"Are you busy?" I asked, as she laid down her pen and looked around.

"Not too busy to talk to you," she said.

"Alice, how long are we to live this life?" She changed color.

"What life, Frank?"

"The one we are living now. It is not the happy, loving life we used to live. You are not mine as entirely and lovingly as you once were."

"I know it." And she sighed and looked drearily at me.

"Why cannot the old days come back again. If I made a terrible mistake, can you never forgive it? I thought it was foolish for us to love each other as we did—at least, to show it as we did—but I have found now, that love is earth's only true wisdom."

She smiled sadly.

"Give me back that love, Alice, which I would not have. Oh, give me back the lost sunshine."

I rose from my seat and stood beside her, but she drew back and shook her head.

"Frank, don't ask me for that."

"I shall know how to value it now, Alice."

"That may be; but I have it not to give you, my poor Frank."

I clasped her to my heart. The passion in that heart might almost have brought back life to the dead; but she did not move. She was like a statue in my arms, and only looked at me and sighed.

"Too late! Too late, Frank!"

"Will you never forgive me?"

"Forgive? Do you think I have one unkind thought or feeling towards you, Frank? Ah, no! But I am chilled through and through. My love is dead and buried. Stand away from its grave, and let us meet the world as we best may."

I leaned my head upon my hands, and my tears fell, and I was not ashamed of them. But they seemed to rouse her into a kind of frenzy.

"You?" she exclaimed suddenly. "You, who a year ago sowed the seed which has borne this fruit, can you weep over your husbandry now? Don't Frank! Take what

I can give you—take my earnest friendship—and God grant we may never part, here or in heaven."

"Ah! in heaven—if we ever get there—you will love me again."

She quoted those sad words which poor St. Pierre uttered on his dying bed:

"Que ferait une âme isolée dans le ciel même?"

(What would an isolated soul do, even in Heaven itself!)

and laid her hand gently on mine.

"Heaven knows, dear Alice, that as I loved you when we first met, I loved you on that unhappy day, and love you still!"

"I am glad to hear it," she said hurriedly. "Heaven only knows what days and nights were mine at first. For my life had been wrapped up in yours, Frank, and it was terrible to separate them. I thought at first that I could not live. I suppose every one thinks so, when a heavy blow falls. But strength was given me, and by-and-by, peace. We seem like two grey shadows, Frank, in a silent world, and we must only wait God's time; and hope that, on the other side of the grave at least, this great mistake may be set right. Believe me, I am happy in being with you, Frank—happy in thinking that the same roof shelters us, and that we shall not part till one of us two dies."

I opened my arms, and, of her own accord, she came to my heart once more; her arms were around my neck, and her head upon my shoulder, and her lips meeting mine. Not as they used to do, yet tenderly and kindly.

"We are older and wiser than we were, and sadder, too, dear Frank," she said with a smile. "Yet who knows? It may be that all the love has not left us yet."

And thus that chapter of our life is ended.

We have never touched upon the subject since; but I have waited calmly for years, and the same quiet light shines always in the eyes of Alice; the same deep, sad tones thrills my heart when I hear her speaking or singing. An angel could scarcely be gentler or kinder than she who was once so impetuous and full of fire. She was unreasonable and exacting and ardent and imperious in those days, I know, and my slower nature was always on the strain to keep pace with hers; but, what a bright, joyous, happy creature she was!

It would have been different but for me. O you, who read this little tale, remember in time that a kind word and a loving look cost little, although they do such great work; and that there is no wrong so deep as wrong done to a loving heart.

WOMEN AND TORTOISES.—I had intended sending you a paper on Bishop Taylor's *Similes*, with Illustrative Notes on some Passages in his Works; but I soon found that your utmost indulgence could not afford me a tithe of the space I would require. Instead, therefore, I send you an illustration of a single simile, as it is short, and not the least curious in the lot:

"All virtuous women, like tortoises, carry their house on their heads, and their chappel in their heart, and their danger in their eye, and their souls in their hands, and God in all their actions."—*Life of Christ*, Part I. s. ii. 4.

"Phidias made the statue of *Venus at Elis* with one foot upon the shell of a tortoise, to signify two great duties of a virtuous woman, which are to keep home and be silent."—*Human Prudence*, by W. De Britaine, 12th edit.: Dublin, 1726, 12mo., p. 134.

"Virtuous women should keep house; and 'twas well performed and ordered by the Greeks:

'... mulier ne qua in publicum Spectandam se sine arbitro præbeat viro;'

Which made Phidias, belike, at Elis paint *Venus treading on a tortoise*: a symbole of wom-

THIRD SERIES. LIVING AGE. 45

en's silence and housekeeping. . . . I know not what philosopher he was, that would have women come but thrice abroad all their time, to be baptized, married, and buried; but he was too straitlaced."—Burton's *Anat. Mel.*, part. iii. sec. 3. mem. 4. subs. 2.

"*Apelles us'd to paint a good housewife upon a snail*; which intimated that she should be as slow from gadding abroad, and when she went she should carry her house upon her back: that is, she should make all sure at home. Now, to a good housewife, her house should be as the sphere to a star (I do not mean a wandring star), wherein she should twinkle as a star in its orb."—Howell's *Parly of Beasts*: Lond. 1660, p. 58.

The last passage reminds us of the fine lines of Donne (addressed to both sexes):

"Be then thine own home, and in thyself dwell;
Inn anywhere;
And seeing the snail, which everywhere doth roam,
Carrying his own home still, still is at home,
Follow (for he is easy-paced) this snail:
Be thine own palace, or the world's thy jail."
—*Notes and Queries*.

From Chambers's Journal.
SCIENCE AND ART FOR APRIL.

SOME of our hard-worked savans took advantage of the Easter holidays to go and refresh themselves with the sight of primroses and young grass in the country; those who were botanists seized the opportunity for new observations on the development of buds; for certain among them—the botanists, not the buds—are excogitating a new theory with respect to those vernal phenomena.—The Bombay Geographical Society announce in their proceedings that they have received a specimen of the walking-leaf from Java with eggs and young; and what seems more curious still, a walking-flower, described “as a creature with a white body, pink spots, and crimson border.”—The discovery has been made in Algiers that a field may be planted with madder, and fed off by cattle for three or four years, without any detriment to the roots, which are afterwards as good for dyers’ uses as those cultivated in the ordinary way.—The sweet sorgho (*Sorghum saccharatum*) is also found to be good for cattle; and paper can be made of the stalks.—The sorgho, which, as our readers will remember, was introduced from China, and is known as the Chinese sugar cane, has attracted great attention throughout the United States, and in every State experiments have been made on its cultivation. Among the most successful are those of Mr. Lovering of Philadelphia: he planted half an acre; the canes grew from ten to twelve feet high, and yielded excellent sugar, specimens of which were exhibited both raw and loaf. It appears that frost is not prejudicial to the sorgho; but it deteriorates in the hot autumn, or Indian summer of the States, the juice being affected in a way that prevents crystallisation. One instance is reported of an acre of sorgho having produced 6800 gallons of juice which is equivalent to nearly 4500 pounds of sugar, and 274 gallons of molasses. Might not this cane be profitably cultivated in some of the countries of Southern Europe, and take the place of diseased and dying vines? Let Baron de Forrester, who has the welfare of Portugal so much at heart, take the hint. Trials might be made, too, in Australia and Natal.—The quantity of maple-sugar made in the United States is about 30 million pounds a year.—It has recently been found that soap is the best clarifier that can be used in the manufacture of sugar. The effect of guano on the growth of sugar-cane has been strikingly shewn at Mauritius. Before that fertiliser was introduced, the produce was about 2500 pounds per acre; now it is 6000, and on some estates, even 8000 pounds to the acre. Agassiz, who resists all the royal and imperial offers made to lure him back from America to Europe, is publishing a great

work, entitled *Contributions to the Natural History of the United States*; two bulky volumes have appeared, and eight more are to follow. He has good opportunities for study, for it is said that the Academy of Natural Sciences at Philadelphia has the largest ornithological collection in the world—27,000 specimens of birds.—In addition to boring artesian wells along their south-western desert routes, the United States government have introduced the camel in experimental journeys over those scorching plains and with satisfactory results.—Henceforth, Ottawa, a young city, admirably situate for agriculture and trade, is to be the capital of Canada.—The president of the Canadian Institute, established at Toronto, congratulated the members in his last annual address, that their number is now 600; that the Journal of their Proceedings is regularly and successfully published once a month; that the Toronto Observatory, founded twenty years ago to co-operate in the great scheme of magnetic observations instituted by the Royal Society, was not abandoned when the object was accomplished; but, at the instance of the Institute, was provided for by the provincial government, and has been rebuilt with stone, and equipped with the best instruments at a cost of £5000. This is something to be proud of, for it is the only one of the colonial observatories which has not been given up. More than 100,000 observations were made at Toronto, and, owing to the peculiar local phenomena, they are of especial value. General Sabine has published them, and brought out the results in three quarto volumes; a fourth is yet to appear; and these to quote the president’s words, “will carry the name of Toronto into all parts of the earth where science is cultivated; and it is not too much to say that the name of a Canadian city, which will be sought for in vain on maps twenty years old, has now become, by means of its observatory, familiar in the mouths of European savans as a household word.” The Prussian authorities are recommending all Prussian emigrants to choose Canada in preference to all other countries, especially to Brazil.

Two Frenchmen claim to have ascended to the very summit of Chimborazo—a feat that baffled Humboldt.—At a recent meeting of the Geographical society, Mr. Graham gave an account of his travels to a Scripture land hitherto unvisited by Europeans, and his exploration of the now ruined cities, which were once under the rule of Og, king of Bashan. Considering their antiquity, they are in remarkable preservation; the houses lofty, with great slabs of stone for roofs, and stone doors carved into panels, and ornamented. A dead silence prevailed; yet so few are the signs of

decay, that Mr. Graham paced the streets expecting every moment to see one of the old inhabitants step forth to meet him.

Sir George Grey, governor of Cape Colony, is making a collection of all the newspapers, vocabularies, and scriptures in native African dialects which he can meet with, to be kept in the Library at Cape Town. He does not confine his researches to the south, but intends to include the whole of Africa in his scheme, if possible. This is doing a good work, one that will be eminently useful to philologists, and prove the means of preserving a knowledge of dialects which, in the course of a generation or two, will no longer exist as living speech. Mr. Moffat (Livingstone's father-in-law), assisted by Mr. Ashton, is publishing a monthly paper in the Bechuana language at Kuruman.

In commercial phrase, Turkey is looking up, and is about to satisfy one of her chiefest wants—means of communication between the interior and the sea coast. Smyrna already exports twice as much as any other Turkish port; what will it be when the projected railway of seventy miles to Aidin is completed, running through the rich fruit district of Asia Minor, along the valley of the Meander, and within nine miles of ancient Ephesus? It is expected that marvellous quantities of silk, grain, and madder, besides fruit, will be brought down to Smyrna. Another line of 250 miles is to run from Samsoun, on the Black Sea, through Pontus, to Sivas, the ancient Sevestia, in the valley of the Halys. There is something almost startling at first in the thought of railways, screaming locomotives, and first, second, and third class penetrating those old countries, rattling along within three leagues of one of the Seven Churches, and carrying new resources and new energies into the land which recalls the names of Mithridates, and Pythodorus, and Caesar's *Veni, vidi, vici*.—Experience has shown in Egypt, on the line from Alexandria to Cairo, that the greatest profit is made from the fares of the fellahs—small peasant proprietors—who travel in numbers, and with a frequency truly surprising. We commend this fact to the consideration of railway directors here at home who may be in doubt as to the advantage of running third-class carriages with every train.

Russia is doing great things in the south—levelling roads, improving old harbors, and deepening the mouths of the Volga at Astrakhan by steam-power. The American engineers who went to raise the sunken vessels in the harbor of Sebastopol, have signally failed. The teredo, that active tunnel-borer, had anticipated them, so that the great men-of-war were found too weak to be lifted, and to have too little cohesion to be blown up; so

there is nothing for it but to leave the once proud fleet at the bottom until the worms have finished it. Altogether, eighty vessels were sunk—an amazing number.—Elsewhere, Brother Jonathan has been more successful: his enterprising divers have got into the hold of the San Pedro, a Spanish war-ship that blew up in the bay of Cumana in 1815, with three million dollars on board, while on her way to punish the revolutionary Mexicans.

The Board of Trade are going to do something wise and praiseworthy, and that is to set up a barometer for the use of fishermen at the several fishing-ports around the coast, beginning with Scotland; thus accomplishing the recommendation made by Dr. Stark, president of the Meteorological Society of Scotland, as mentioned in our last. It appears that in one or two places where a barometer was already kept, the men seeing a fall of the mercury, stayed at home; while at neighboring ports, where no such friendly monitor was at hand, the men put to sea, were caught in a storm, and some perished.—An endeavor is making to advance meteorology as a science, by a widely extended scheme of observations, which will include Petersburg, Algiers, Dublin, Lisbon, Greenwich, Bourdeaux, and other places—Paris to be the centre for discussion and publication. To facilitate the work, the mean of the several phenomena at the different stations will first be established, so that only the variations from that mean will have to be recorded. Especial attention is to be paid to the wind, on which the weather so much depends; and as the stations will intercommunicate by telegraph, it is thought that predictions of changes of the weather will be possible.

During the past winter an unusual cold prevailed in the south of Europe, after a spring-like temperature had set in here in England. At Turin and Naples its rigor was excessive; at Ferrara the Po was frozen, and men and cattle crossed on the ice; Malta shivered; Constantinople was frozen up and half-starved for want of food, owing to the deep snow having blocked the streets and roads; the highlands of Algeria wore for a while a strange white winter-coat; and it even actually snowed at Cairo. We need hardly say that such a phenomenon was never before witnessed in Egypt, not even by the oldest inhabitant, nor yet his great-grandfather.

At Brussels on the 17th January an extraordinary perturbation of the magnet was observed, shewing a considerable excess in all the phenomena—intensity, declination, &c., which lasted nearly the whole day; an aurora too, was visible in the early morn; and soon afterwards came the news of the earthquake in the Neapolitan territory on the night of

the 16-17th. The earthquake shocks have not yet ceased; and the city of Naples itself has been shaken.—The convulsions have been felt further east, and we hear that Corinth has ceased to exist except as a heap of ruins.—Science has a footing in Naples, St Janaurius notwithstanding, and a quarto volume has recently been published by the Academy of Sciences in that city, giving full particulars of the eruptions of Vesuvius in 1850 and 1855, with ample maps and plans; and there is no doubt that Signor Scacchi, a first-rate geologist, will draw up an account of the calamitous phenomena of the present year.—And incredible as it may appear, there is a Royal Academy of Sciences doing good work at Madrid, publishing their *Memorias* in quarto, filled with able articles on the climate, geology, and natural history of the several provinces of Spain. One of the latest contains a geological description of the Sierra Morena.

Mr. Dawson, inspector of roads, &c., at Newcastle-on-Tyne, has laid a Report before the corporation of that town, shewing the comparative cost of macadamised and paved roads. The maintenance, he says, of 275,249 square yards of paving for a year cost less than a half-penny a yard, while to keep up 115,096 yards of macadam cost, for the same period, 4 1-2d. a yard. Hence there was an expenditure of £2000 more than would have been incurred for paving. Nearly 5000 tons of stone were broken and laid on the macadamised road; and of this, great part is wasted for want of heavy rollers to press it at once to a solid surface. In this latter respect, Hull sets a good example, for there the rollers are used.—It is known to engineers that in the fixing of screw-piles the timber is apt to twist, whereby its strength is diminished. M. Oudry, an engineer at Bayonne, has contrived a wrought-iron case or tube, in which he encloses the pile during the screwing in, then taking it off, uses it for others.—A school of stokers is established at Lille, where the men are to be taught the elementary properties of steam, the utility and manipulation of the different parts of the machine, the way to burn coal with efficacy and economy, and so forth. With such a course of instruction as this, the loss and other ill consequences which attend on the ignorance of stokers will no longer have to be complained of; and in case of accident to the driver, there will be a man ready to take his place.—A late return shews that 109,660 persons are employed on

the railways in the United Kingdom, exclusive of the lines not yet finished.

Messieurs Mourier and Vallent exhibit in Paris a new ornamental metal, to which they give the name of *oréide*, from its similarity in appearance to gold. It is made of pure copper, zinc, magnesia, salammoniac, and quicklime fused together; and when properly prepared, is very brilliant, and is easily cleaned by acidulated water.—And a metallic alloy is mentioned, composed of lead, tin, and bismuth, which is very fusible, and well suited for medals, ornaments, mouldings, and statuettes.—Veins of lead have been discovered in the base of Plinlimmon, near Llanidloes, of excellent quality, and so rich in silver as to yield twenty ounces per ton of the precious metal.—And in Huntingdonshire, on the estates of the Marquis of Huntly, at Orton, large deposits of iron-stone have been brought to light, and now only await the hand of industry and enterprise. But as regards iron, Cleveland will be for centuries to come our English California.

The Society of Arts have had their advertised statement and discussion about cotton, in the course of which it was shewn that if industry could only have fair-play in India, and land could be had on proper terms—two questions, by the way, of which Mr. Ewart has given notice of motion in parliament—then we might get all the cotton we want from that great empire, and more. As it is, progress has been made. In 1834-35, India sent to England 38 million pounds of cotton; in 1855-56, 170 million pounds; and if we add to this the quantities sent to other countries, the total amounts to 237 million pounds.—Another subject discussed by the Society is electro-motive machines; and although Mr. Allan, the author of the paper, feels confident that machines driven by electricity will some day be generally used as auxiliary to steam, the practical men who listened to him took a less hopeful view of the question.—M. Tréhonais's paper on Agriculture in France, contained a bold summary of the causes which make cultivation of the soil such a miserable resource among our allies. One great evil is centralisation, attracting the principal land-owners to the metropolis; another, the expenditure of enormous sums in the embellishment of Paris to the detriment of the country; so that artisans and laborers forsake their homes, fields remain uncultivated, and the population, as shewn by the last census actually diminishes.

From Chambers's Journal.

THE SLAVE-TRADE IN TURKEY.

THE newspapers gave an account, a few months ago, of the seizure, near Smyrna, of a slave-ship, and the liberation of the slaves it contained—one of those farces with which the Turks, from time to time, gratify their western admirers, and amuse, or rather abuse, the European public. No one, not even their bitterest enemies, can refuse them credit for the perfection to which they carry this art of throwing dust in the eyes of their too lover-like protectors; nor is their merit the less, that their success can be accounted for by the consideration that it is the only art they design to cultivate. Like the dangerous man of one book, they are masters in their one art. It is the Alpha and the Omega of their civilisation—their way of expressing their regard for public opinion. To seem and not to be, is the problem which has been so successfully worked by the Sublime Porte for the last century and a half, especially for the last half-century.

England and English ambassadors—the only people who exercise a disinterested philanthropy in looking after the domestic concerns of the Turks—have labored for the last twenty years to persuade the sultan to abolish, in all its branches, this one of his peculiar institutions. It is instructive to mark the progressive steps by which the power of the charmer's voice has been made evident. First, the fair daughters of Circassia were ordered to be kept for sale henceforward only in private houses; then the slave-market, a large airy court surrounded by small rooms, and with some fine old trees in the centre, situated in the very busiest part of the bazaar, was ordered to be closed, and the human merchandise was transferred for sale to unwholesome, underground vaults, near Sultan Suleiman's mosque; next, under the pressure of war, the importation of white slaves was positively forbidden; and finally, the traffic was declared to be abolished by an imperial firman. England and humanity had thus gained a notable victory—upon paper. The practical result of all these measures was, that last summer the slave-market of Constantinople was so overstocked with white ladies, that they had fallen to one-third of their usual price; while black slaves, plentiful as blackberries in autumn, were almost as valueless. Never since the massacres of Scio had the faithful been able to stock their establishments on such reasonable terms.

The fact is that the slave-trade is at this moment as active as ever in all parts of Turkey, excepting in Egypt, if Egypt must be called Turkey. Its pretended abolition is only one of those paper measures to which the government has recourse periodically, to

satisfy the exigencies of some Frank, generally English, ambassador. Thank Heaven! while the representatives of other nations are carefully watching over their own interests, ours is even more actively and less selfishly promoting those of others.

To attempt to abolish slavery in a Mohammedan country is no easy task, to pretend to do so when those Mohammedans are Turks under Turkish rulers, is almost a desperate one. The abolition of male slavery would be difficult, but perhaps, with certain exceptions, not impossible; but to do away with female slavery would be striking at the root of Turkish society itself. It would be the subversion of domestic life as Turks understand it, alike opposed to their habits and to their religious ideas. The sultan has no wives; it is beneath his dignity to marry—he has only slaves; he is the son and grandson of slaves, bought in the market with "money current with the merchant." The hundred or two of white ladies who bloom in the parterre of his harem, require a still larger number of black ones to wait upon them, for no respectable Mussulman woman in Turkey, however poor she may be, would accept domestic service. What is true of the sultan's harem, is equally true on a smaller scale of the households of all his subjects. Free domesticity is unknown among women, and the small shopkeeper's wife who with us would employ a charwoman or keep a servant-of-all-work, has in Turkey one or two slaves at her orders. Male slaves, black and white, are still more numerous than females, and they are the only servants who enjoy their master's confidence. We cannot imagine a Turk without slaves; he would be as helpless as a child. We have seen a Turk, one of the greatest men in the empire, ask one of the slaves who stood before him for his handkerchief. The slave told him he had it by him. The master fumbled on the cushions without finding it; the slave was not the less positive that he had it. He stepped forward to search for it, rolled his unwieldy lord first to one side, and then to the other, to see if it were under him, then he searched his pockets, and finally drew it from his waist-band. Abbas Pacha, for it was no less a personage than the late viceroy of Egypt, submitted to this search with an unconcerned air, which showed that it was a common affair; and after the five or six minutes employed in it, resumed the conference with the English consul-general which it had interrupted.

Our readers do not require to be told who are the unhappy creatures employed by the sultan and by all wealthy persons to watch over the morals of their harems, but it is necessary to refer to them, not only to de-

nounce the inhuman treatment they have been subjected to, to qualify them for their degrading duties—and their number has of late years little, if at all, diminished—but still more to call attention to the monstrous perversion, little known or thought of in England, by which these poor wretches have become the official guardians of the "Prophet's" tomb at Medina, and of the great Mussulman temple in Mecca. The barbarous practice of which they are the victims has thus become elevated to a religious rite, not only connecting the institution of slavery with a religion whose fairest claim to our sympathy is the mitigation its author sought to effect in the condition of slaves, but making slavery in its most revolting form a part of the Mussulman ritual.

Yet, while we denounce the dishonesty of a pretended reform which can only deceive the wilfully blind, we have no wish to convey to our readers a false impression of the condition of the slave in Turkey. He is not, as a general rule, employed in field-labors; he is not driven to work by an overseer armed with a lash; he is subjected to few privations, and he is not generally discontented with his lot. Bought at an early age, the young boys are employed only in the lightest tasks, such as presenting a cup of coffee, carrying a pipe, or standing for hours in silence with folded hands before their master. They are the playfellows of his children, with whom the white slaves are frequently educated. These often rise to high rank through his influence, and not seldom marry his daughters. Two of the present sultan's brothers-in-law were bought in the market of Constantinople. The slave is regarded as the child of the family—no odious distinctions of color are known in the east, though the negroes do not receive the same education as the whites, and a great man would hardly choose a black for his son-in-law. But even these, if accident advance them to office, as sometimes happens, become at once the equals of the proudest Osmanli. No idea of disgrace is attached to slavery—the black slaves of a great man regard themselves, and are regarded by him, as infinitely above his white hired servants. They belong to him; they are a part of himself; and if he give them their freedom, he provides for them, and the relationship of adoption does not cease. When freed, they become at once the equals of every one. The Turks are thoroughly democratic; they have no rank but that of service, no nobility but that of money. This is the tendency, or rather the condition of absolutism, for the sovereign is not absolute when the subjects have rights he must respect; and the Turkish democracy is the most practical of all—it is the equality not of freemen, but of slaves.

Reared in domesticity, with no stimulus to industry, eating and sleeping without a thought of the morrow, the majority of the slaves are incapable of thinking or caring for themselves. To free them, therefore, is the greatest punishment that can be inflicted upon them. One of our friends in Cairo had long suffered in patience, or at least in silence, the whims and insolence of his wife's neutral attendant. At last, when his conduct became unbearable, neither exhortations nor threats having any effect, he determined to punish him. He did not sell him—he gave him his freedom. The poor useless wretch, when days went by, and he was not, as he supposed he must be, recalled to the house where he had so long been the tyrant, became as humble as he had been insolent, and going round to all his master's friends, besought their intercession for his restoration.

As a general rule, slaves are treated by their masters hardly indeed as reasoning beings, but with great kindness. As children, they may be whipped; but only great men venture to bastinado them when grown up. In fact, their masters are too completely in their power to venture to exasperate them by harshness. In the last two years we have known two men, one the governor of a town in Asia Minor, the other a wealthy merchant, murdered for their brutality by their own slaves. It was from two of his white slaves that Abbas Pacha received at last the wages of his misdeeds.

The female slaves, in the seclusion to which they are condemned, suffer perhaps more than the men. They are exposed to the caprices of their white mistresses or of rival favorites, and the ill-humor of their guardians often falls heavily upon them. We remember seeing, a few years ago, in Damascus, one of the black keepers of the sultan's harem. He was living there in exile with the rank of pacha, having fallen into disgrace for a manual correction administered to one of the reigning favorites, who had found means to persuade the sultan that it had been undeserved. On the other hand, no slave who has born a child to her master can be sold; her children, whatever their color, are regarded as legitimate, and come in for an equal share of their father's inheritance. If dissatisfied with their master, slaves of whatever color or sex can oblige him, or rather have a legal right to oblige him, to sell them. Of course such a right can rarely be enforced. We know that with all this kindness there may coexist a large amount of tyranny and brutality, and in a large establishment there may be no small sum of unhappiness. We have known slaves appear before the *cadi* to claim the right of being sold, but we have never

known a case where such an appeal was successful.

It is not, however, so much the condition of the slaves in their master's house which seems to warrant the interference of Europe, as the dreadful sufferings they are exposed to before reaching the market. The white slaves, at least the females, are exempt from these, and since the Circassians choose to traffic in their own flesh and blood, and the Turks to violate the prescriptions of their religion, which forbids the purchase of Mussulmans, we need not perhaps insist upon a reform which Russia will sooner or later effect. But for the black slaves, we have a right to interest ourselves, because helpless and unwilling victims, they are subjected to sufferings even more horrible than those disclosed recently by the capture of a slave-ship off Jamaica.

The Egyptian frontiers are now closed to this traffic, and Constantinople depends for its supply upon Tripoli. The slaves thence procured are brought from the interior of Africa, a distance of 1000 or 1500 miles, sometimes from even more distant countries. They are the victims of the wars carried on by the chieftains of the black states nearest to Fezzan, for the sole sake of the prisoners, whom they sell to dealers from the Turkish territories. Murder stains this foul speculation in the first instance, and yet this is the least of the horrors which disgrace it. The captives are forced to follow on foot the caravans of their purchasers through sands hot as a furnace in the daytime, and cold as ice at night. Men and women, boys and girls, without clothes to cover them, or shoes to protect their feet, journey on for weeks, sometimes for months, supplied only with the scanty food which suffices to ward off death, and often suffering horribly from thirst in a region where wells are rare, and the heat of the sun often dries up or corrupts the contents of the water-skin. On one route which the caravans follow there is a distance of twelve days from one well to the next, and hundreds of victims annually whiten the desert with their bones. If only half arrive, the profit is still so enormous, that the loss seems trifling to the hardened wretches in whose eyes a slave is only merchandise. The survivors who reach Tripoli or Bengazi are carefully fed, that they may recover flesh, but they are still left in their almost primitive nakedness, shivering from the cold of a climate so different from their native tropics, that the buyers may have ocular demonstration that they are really freshly imported. The Turks prefer slaves who have as yet received no instruction. The slave-trade is the principal branch of commerce in Tripoli, and up to the present time it has been encouraged

by the government in every possible way, even to the loss of more legitimate traffic. The number of slaves exported from Tripoli, in 1854 was three times larger than under the independent deys twenty years previously. About a year ago, after the publication of the firman forbidding the trade, we had occasion to speak with a merchant whose house is on the south-west frontier of Tripoli, and who trades to Timbuctoo. "What will become of your trade now, if this firman is enforced?" was the question we asked. "It would be time enough to answer you," he said "when the firman is acted upon; but in those countries there is no want of objects of traffic. Slaves are at present the most profitable; but when these will no longer pay, there remain ivory, gold-dust, ostrich-feathers, and many other commodities. The people of the inner country cannot do without the articles we carry to them, and they will soon find wherewithal to purchase them. God is generous." He seemed little disturbed by the idea of the suppression of the trade; but whether from a conviction that this was not really intended, or from the confidence that other profitable investments would be found, we do not pretend to say. The goods exchanged for slaves are coarse cottons, paper, and small articles of hardware. It will be impossible to abolish the trade in men with all its attendant horrors, so long as slavery is permitted to exist in any shape in Turkey. Only its final abolition can put a stop to importations which the authorities both in Tripoli and Constantinople are interested in encouraging. Even the sultan's ships-of-war are used for the conveyance of slaves.

We can understand the desperate efforts made by the Turk to maintain this institution; but we profess ourselves unable to understand or to forgive the lukewarmness in the cause of abolition of his European supporters. The very argument which induces the Turk to resist the attempt, is the strongest that can be urged in its favor. The abolition of slavery would effect a radical change in Turkish society; and if we demanded it on no other grounds, we should call for it on this one. If Turkey has become a European state, it can be permitted to take a place in the congress of Christian nations only on the condition of remodelling, not the government alone, but still more the social relations of its subjects. It is vain to hope for any real amelioration in these till slavery be abolished in every corner of the empire.

But if slavery be an essential institution of Islam, then we are bound to hunt the professors of such a creed out of Europe. Humanity has a right to be intolerant of a standing offence against her laws; and if she proclaim a crusade in their vindication, freemen of all

nations and of all creeds will acknowledge that her object is holy. But this is not the case. Islam found slavery established, and it mitigated its rigors. In Tunis, slavery has for many years been entirely done away with—an unanswerable argument, by the way, in favor of the independence of the bey, whom our English policy seems inclined to reduce to his long-forgotten subjection to Turkey. If, on the part of the Turkish government, the desire to abolish slavery were sincere, and not a mere pretence to blind the people of Europe to the real nature of their rule, it would not be difficult to bring it about. The first step necessary is to cut off the supply. To effect this, a couple of steamers cruising off the coast of Tripoli, backed by more stringent orders issued to the English consul, would be sufficient; and the waters of the Mediterranean would no longer be stained by this traffic. The traditions of Islam itself would go far towards extirpating domestic slavery; for the Arabian prophet teaches that the granting his freedom to a slave is a meritorious work in the eyes of God; he even enjoins it as a propitiatory sacrifice on certain occasions. In the opinions of all pious Mussulmans, it is not lawful to retain a slave who has embraced Islam in servitude more than a short number of years. It would therefore be enough to forbid the sale of slaves from this time forwards, either publicly or privately,

and to decree the freedom of all slaves whatever after the lapse of a brief term. This would lead to their speedy emancipation; for their masters would in general rather free them at once of their own accord, than allow them to acquire their liberty as a right. Of course the law prohibiting the sale of slaves must be accompanied by the fixing of express punishments for its transgression; its mere publication and communication to the European ambassadors would give it no efficacy.

The Turks are too thoughtless to consider the sufferings of the poor slaves before they reach their hands; they only remember that they were idolaters, and that they have made them Mussulmans. They are persuaded that God has put them into their power that they may save their souls. There is every excuse to be made for the Turks, who seek to evade a change which would revolutionise their habits of life, and whose necessity as a matter of humanity they cannot appreciate; but there is no excuse for their government, which thus scatters firmans broadcast over Europe, for the sake of propitiating a public opinion which it seeks to deceive; and still less is it possible to excuse the Christian diplomacy which stands smiling by and winks, lending the sanction of its silence to the bad faith of its proteges.

THE CHASE OF THE OSTRICH.—This amusement is held in high estimation, and is only followed by the Arab aristocrat, who makes a long and expensive preparation for its enjoyment. For some weeks before the time appointed for the sport, the Arab feeds and trains his horses with especial care; and, unless their wind and condition are perfect, they stand no chance with the ostrich, he runs them out of sight. This is exactly what is done in our own country by good kennel management; the fox is over-matched by the condition of the hound. There is a curious point of similarity between the English sportsman and the aristocrat of the Sahara; he rides his second horse in the chase of the ostrich as the other does in that of the fox. But, if anything, he of the desert has the advantage; he posts his relay with such a thorough knowledge of the running of his game, that he rarely misses his mount; whereas the Meltonian makes a bad cast frequently, and as frequently he finds his second horse already half-beaten by the bad management of his groom. When the ostrich is blown in the chase, the rider strikes him a sharp tap on his feather-

less head, and at once deprives him of life, a small stick being his sole weapon. A kous-koussou, surmounted by cutlets taken from the breast of the ostrich, is the royal dish of the desert; while the steam from the boiled fat imparts an unctuous taste and gamy flavor to the whole. The Arab of the desert exchanges ostrich feathers for corn grown by the Arabs of the Tell; thus their value to the former is incalculable, and were it not for the kous-koussou, they might follow the plan of the Lincolnshire fen-men with very justifiable advantage, that is, pluck the birds alive and turn them out for another crop. A visitor, anxious to witness the chase of the ostrich, in order to obtain accommodation and approximation to the hunting-ground, should go to Tougort, the capital of thirty-five villages in the Oasis of Oued-Rir, seventy-six leagues from Biskra; or to Leghrouat, a town of four thousand inhabitants, south-west of Riskra; or to Gardain, a town of the Beni-Mzab, easily accessible from Algiers, all within the Algerian Sahara, and consequently under the government and protection of France.—“*Davies' Algeria.*”

From The Saturday Review, 27 March.

SHAFTESBURY'S CHARACTERISTICS—A
NEW EDITION.

On Thursday, November 26, in a speech delivered at Crosby Hall, the Earl of Shaftesbury protested against the reticence which had been observed on the horrible details of the Indian mutiny. "The people," he said, "ought to know what has been done. . . . the horrors that were perpetrated and endured exceed all power of imagination." So he went on—while declining to speak of "the indecency of the details, since they were such that you could not commit them to writing"—to describe actual scenes of "women lying naked on their backs," and exposed to "insults the most awful, the most degrading, the most horrible and frightful to the conception, and the most revolting;" and of "children cruelly and anatomically tortured in the presence of their horrified parents." This speech was commented upon, and its entire and strict veracity recognised, in a leading article of the *Times* of November 28. On January 29 appeared a letter in the *Times* written in India, with the signature of *Judex*, which, purporting to be the result of inquiries made on the spot, declared that nine-tenths of the stories of violation and abuse were utterly untrue; and the writer asserted that, having made it his business to ascertain the truth, he distinctly believed "that not one survived to tell of injuries suffered, and that not one mutilated, tortured, or, as far as he could gather, dishonored person was alive." This letter, naturally enough, attracted a good deal of attention. Amongst others, it roused a writer signing himself "A Lover of Truth," who, in the *Times* of February 2, called attention to a speech of Lord Shaftesbury delivered in November, at Wimborne, in which his Lordship is reported to have said:

"I myself saw, the other day, a letter from the highest lady now in India, describing that, day by day, ladies were coming into Calcutta, their ears and their noses cut off, and their eyes put out; that children of the tenderest years have been reserved to be put to death under circumstances of the most exquisite torture."

"A Lover of Truth," faithful to his assumed designation, observed that Lord Shaftesbury was bound either to prove his assertion or to withdraw it. On the same day, a paragraph in the official type of the *Times* stated "that, with reference to cases of alleged mutilation by Indian mutineers, the General Relief Committee, after careful inquiries, have ascertained that no such cases have come down the Ganges, nor have any come to England." On February 3, "A Lover of Accuracy" denied, in a letter to the *Times*, that Lady

Canning ever wrote such a letter as Lord Shaftesbury had imputed to her, and then demanded of Lord Shaftesbury who wrote the letter which his Lordship "saw," and by whose authority it was quoted by him. On February 4, Lord Shaftesbury, in another letter to the *Times*, remarked that some time before he spoke at Wimborne "he heard that there was a letter from the highest lady, &c., but that if, in the heat of speaking, he said 'he saw,' he had corrected this misstatement into 'he heard,' and that he had sent out a corrected report of his speech, which ran, 'I heard a letter from the highest lady,' but that, after all, what he meant to say was 'he heard of' a letter from the highest lady," &c. But he went on to add, "I have by me many letters narrating cases of still greater atrocity; but the sufferers or their relations shrink from any disclosure of their names."

Few thought it worth while to catechize Lord Shaftesbury any further. The man who could say, and who never denied that he had said, "he saw a letter," when it turned out that he only "heard of a letter," was not worth powder and shot. People deemed Lord Shaftesbury's assertion as to a matter of fact worth no investigation, and it was once generally assumed that "in the heat of" writing, the "letters in his possession" would prove to be as apocryphal as Lady Canning's "letter which he saw." Not so thought Mr. Hargreaves, of Craven Hill-gardens, who, in the *Daily News* of March 24th, has printed a recent correspondence with Lord Shaftesbury. Pinning his Lordship to the letter of February 4, and to the statement that "many cases of mutilation had come to his Lordship's positive knowledge," Mr. Hargreaves asked for "the testimony on which that statement was founded;" because "the Calcutta Committee had found no such cases, the India Company had discovered none, none had come down the Ganges, none had arrived at Southampton, and though a lady had expressed a wish to leave a portion of her property to such unfortunates, the Directors of the East India Company had been unable to find a single case."

Lord Shaftesbury's reply is perfectly beautiful, and we only wish that there were a Pascal to show up the successor of Busenbaum & Co. Mr. Hargreaves, be it observed, asks Lord Shaftesbury about the cases which he, Lord Shaftesbury, had deposed to, which had come under his Lordship's knowledge, and the testimony of which was in his possession. Hereupon:

"Lord Shaftesbury presents his compliments &c., and has the honor to state that his belief of the facts mentioned in the various papers of atrocities in India is quite unshaken."

That is to say, Mr. Hargreaves having asked about the mutilated "sufferers" whose cases had been detailed in certain "letters," which Lord Shaftesbury "had by him" on February 4—but who, being then alive, "declined to give their names"—to this very precise question Lord Shaftesbury replies by saying he still believed the newspaper accounts of the massacre of Cawnpore.

Mr. Hargreaves, nothing daunted, returns to the epistolary charge, and after a quiet hint at "contradictions so remarkable," ventures "to ask whether his Lordship is in a position to convey such particular information to the India Board that such cases as those described in the press and elsewhere really exist, by which means the lady's intentions may be fulfilled." Lord Shaftesbury's reply we must give *in extenso*—his letters are too good to be abridged :

"March 13, 1858.

"Lord Shaftesbury presents his compliments, and requests leave to decline giving any names confidentially entrusted to him.

"If Mr. Hargreaves desire a special case, he would do well to communicate with the 'Eye Witness,' who stated one in the *Times* of Feb. 5.

"Lord Shaftesbury must add that most of the cases which have arrived in England are those of persons whose circumstances in life place them above poverty."

Mr. Hargreaves is pleased to hear that "most of the cases are out of the reach of poverty," and "cannot but conclude that the earlier statements have dwindled down to a number so exceptional as to leave our Indian fellow-subjects free from so terrible a stain."

At length Lord Shaftesbury is fairly nettled. Driven from point to point, he at last fairly breaks into a rage, and insults Mr. Hargreaves :

"March 17, 1858.

"Lord Shaftesbury presents his compliments to Mr. Hargreaves. Lord Shaftesbury is of opinion that Mr. Hargreaves had better write to some one in India, and he will easily ascertain whether the cases of atrocity were few or many in that country."

The reply by Mr. Hargreaves to this insult would goad any body whose moral organization is less pachydermatous than that of a veteran religious talker, into either proof or recantation—proof for the sake of those who, not being among the "most who have arrived in England," and whose circumstances happily place them above poverty, might stand in need of the lady's charity—or recantation for the sake of an old-fashioned virtue called truth :

"March 19th, 1858.

"My Lord,—I beg to acknowledge the receipt of your letter of the 17th inst. I am at a loss to conceive how any one in India can tell me that which must be known to your lordship alone; and with reference to the mutilations in general charged upon the Sepoys, that which the Relief Committee in Calcutta has failed to obtain proof of, your lordship can scarcely expect me to succeed in. But it is unnecessary to dwell on this point after the statements made in the House of Commons last night by the Chairman of the India Board. Mr. Mangles, it is quite clear, does not believe in the existence of a single case of mutilation. I have also before me a letter from the Secretary of the Peninsular and Oriental Steam Company, which states that the Board of Directors, 'having made inquiry on the subject, have not been able to discover that any case of mutilation has existed among the passengers who have returned to this country by the Company's steamers since the outbreak of the mutiny in India.'

"In the face of such evidence, I feel that it is trifling on a subject of the gravest importance to refer me to India. Holding, as your lordship does, a prominent position before the public, it seems to me that you are bound either to produce satisfactory proofs of the statements you have made on this subject, or to make a speedy recantation. No single individual is, I venture to think, more responsible in the matter than yourself.

"These stories, so loosely told and so feebly supported, have stimulated to a frightful degree the vindictive passions of our countrymen; they have been the talk of the barrack-room and the bait of the recruiting sergeant, and the result has been an indiscriminate slaughter in India, which has sacrificed the innocent and the guilty alike.—I am, my lord, your obedient servant,

"WM. HARGREAVES."

"The Earl of Shaftesbury."

It is quite superfluous to enlarge upon all this. We have extracted the whole story as it stands in the newspapers. We draw no conclusions against Lord Shaftesbury, and no moral from the narrative. The writer of such letters as we have quoted is quite beyond any remarks of ours. He dwells, like the Epicurean gods, in a serene atmosphere, far above the motives or appeals of this common, vulgar, truth-seeking, accurate world. He contemplates only his own perfections and the interests of religion; though it may become a question to religion and to its particular people, whether its interests are best recommended by a champion of this peculiar sort. It is nothing to Lord Shaftesbury that,

in "the heat of speech," he said the thing that is not—that he has lashed into frenzy the passions of an empire, and perhaps brought to death hundreds of innocent men in India. It is nothing to him whether the people of England have a right to know if their sisters and friends have been dishonored or mutilated, or whether these stories are the result of "the heat of speech," or the carelessness of printers. His Lordship said that he had "seen" a certain letter. "*Seen* a letter, my Lord?" "Yes, seen a letter—heard a letter—heard of a letter—it's all the same. What matters about being accurate in such trifles? I only meant that I had heard of the letter. It is unlucky that the letter was never written; but never mind, I have now in my possession many such letters." "Who wrote them? where are the writers? I am anxious to provide for even one of them, to provide for her for life." "How troublesome you are—I tell you most of them don't want your money." "Is it so, my Lord? then at least some of them do; tell me of one." "Don't bother me—go to India if you want to find them out." This is the religious leader: only it is not quite the religion of which an Apostle speaks in these remarkable words—remarkable as in other things, so in their very curious and significant collocation, and so applicable to either alternative, whether Lord Shaftesbury's cases of mutilation do, or do not, exist:—"If any man among you seem to be religious, and brideth not his tongue, but deceiveth his own heart, this man's religion is vain. Pure religion, and undefiled before God and the Father is this—to visit the fatherless and widows in their affliction"—which not only Lord Shaftesbury does not do, but actually prevents Mr. Hargrave and the charitable lady from doing.

From the Saturday Review, 17 April.
HISTORIC DOUBTS AND THE ALLEGED
SEPOY ATROCITIES.

At the present moment a curious instance of Historic Doubts is before us, which, if it is to be considered a typical one, goes far to shake our confidence in all history. It is as to the extent—indeed, as to the existence—of mutilations and violations committed by the Sepoy mutineers. In itself, the question has no special bearing on the native character. The reality of the rumors so long prevalent would be a terrible fact for the relations of the sufferers; but it would be no new or strange thing. War is not war without such horrors. If the Sepoy rebellion has not presented instances of violation of women, it is the only war on record which is so honorably and remarkably distinguished; and the fact that, as far as all evidence goes, not a single

case has been proved, leads at least to the conclusion that the Sepoy character has been singularly free from the normal commission of such atrocities. In no other war could there have been any controversy or doubt on the subject. Everybody knows what sort of terrible deeds form the staple of Callot's *Horrors of War*. Shakspeare, repeating the old chroniclers, tells us what civil war was in England in the Wars of the Roses. The license of all armies at captured towns, from Magdeburg to Badajoz, never admitted of a moment's doubt. And in India it was more than probable that the same sort of thing would occur. Everything conspired to make the commission of every conceivable wickedness, especially of this kind, likely—the Oriental character, the sensual and bloody habits of the natives, the defencelessness of the women, and the supposed injuries of a century. What a combination was here of motives for violation and cruelty! Hence it was, that very naturally, and even reasonably, as soon as it was known that scores of our countrywomen and children were in the hands of the mutineers, the conclusion seemed irresistible. Nobody paused to examine the evidence of facts which fell in with every one's preconceptions. Much therefore was written, and more was said, and most was whispered, about the extent and universality of the "Sepoy atrocities." It was a waste of time to look for proof of the sort of thing which books and history had always connected with war. We knew what was done by Parisian mobs and German soldiers—we remembered the license of Wallenstein and Tilly, and of the French Marshals. There were lustful, bloody savages, and there were defenceless women and children in their power. What need of words in such a case? The facts proved themselves.

And so people let their imaginations—and Lord Shaftesbury let his tongue as well as his imagination—have full play. It was deemed a duty to lash up the nation to frenzy. It was—so preached Lord Shaftesbury—a wrong and misfortune not to know the worst, and to let it be everywhere known. It was a point of honor to believe in the wholesale dishonor of our countrywomen, and too many of us were almost glad of the Christian excuse for wreaking most unchristian vengeance. Nor did the evil stop in stimulating evil passions. The cry had a political value, and it was urged, as a matter of policy, that we ought to exterminate the rebel forces because they had violated our countrywomen; and the whispered appeal for facts, merely as materials for history, was silenced amidst the howling indignation against the Sepoys, and the denunciation of the Sepoy apologists. We were all on the look-out, not without a pleasing horror, for

boatloads of mutilated friends and relations arriving by every mail at Portsmouth.

Mr. G. Campbell, writing under the name of "Judex" in the *Times*, was the first to dispel the tragic illusion. To prove a negative is impossible—till the end of time it can never be demonstrated that women and children have not been dishonored and mutilated in India. But "Judex" showed that he had made every local inquiry, and could not establish a single case. The heart-rending inscriptions and appeals for mercy inscribed on the slaughter-house of Cawnpore, were found to be forgeries of some sentimental or wicked fool in the relieving force. When the troops entered, not a line was found written on the walls. Sir John Lawrence and Mr. Cecil Beadon, in their despatches to the East India Company, stated, as "an ascertainable fact, that the tales of Sepoy atrocities were groundless." Mr. Mangles, in his place in Parliament, quoted Captain Lowe as his authority for the statement "that he had been unable to discover that there was the slightest foundation for the charges which had been made against the Sepoys in this respect notwithstanding that a strict investigation had been made on the spot;" and in particular, as regarded "the case of Miss Jennings, whose death was said to have been preceded by the infliction of the most horrible sufferings, it was established beyond all doubt that it had not been attended by any circumstances of aggravation." Lord Shaftesbury, upon being brought to book by Mr. Hargreaves, contented himself with a general reiteration of his entire belief in the atrocities—a belief which he has never attempted to justify, and which stands confronted by the fact that a lady at Edinburgh is ready (so the chief magistrate has reported) to make pecuniary provision for any person mutilated in India and now known to be alive.

Here we think the matter ought to have rested. What Lord Shaftesbury may deem proper to assert on any subject is of no conceivable consequence except to his friends and admirers. And we have on a former occasion alluded to this remarkable nobleman's conduct with respect to these alleged Sepoy atrocities more as an illustration of the idiosyncrasy of a popular religious leader, and as a personal exhibition of character, than with any view as to the actual events of the Indian mutiny. We think it most likely that some such cases have occurred. If they have not occurred, the Indian outbreak is entirely exceptional. That the atrocities were not general—that they were not common—is demonstrated by the most complete moral evidence. We have had at work every test to which any historical event can be subjected. Investigations have been set on foot, on

the spot, and by unprejudiced authorities, or rather by those who were ready, perhaps anxious, to accept proof of the alleged fact. But whenever name, and place, and person were given, the alleged fact moved off or melted away. Miss Jennings's case, for example, was distinctly disproved. Are Lord Shaftesbury's alleged proofs in writing? On the other hand, are we to make no account of such names as Cecil Beadon, Lawrence, Lowe, and Mangles, who have looked for evidence, and found none? We have simply Lord Shaftesbury's anonymous correspondent against men with names, and those among the highest in India and England.

But it did not suit sectarian and political rancor to let the matter rest here. The convenient artillery of newspaper correspondents, anonymous and irresponsible, remained, and the way in which it has been worked is worth condensing into a brief and complete view. We make our extracts from the *Times*, which for some mysterious reason is pledged to keep up the fiction of the wholesale Sepoy atrocities, and which, with this object, suppressed the Shaftesbury and Hargreaves correspondence. On the 31st March, appeared in the *Times* a letter from a convenient "Father of one of the Indian Sufferers." What is his statement? That he had just had a letter from a friend, who has an old friend, whose two oldest friends had their noses and ears cut off. Not a single date, or name, or particular of place or sex—only an anonymous writer proving the case through three relays of anonymous friends—his friend, and his friend's friend, and his friend's friend's two friends; and on evidence of this kind we are asked to believe all that has been alleged. The "Father" invited other correspondents, and the initiative was accepted, but with a very instructive result. On April 1, "T. E. H." went into details, and at last produced a case with every circumstance fully detailed. It is quite worth while to examine this history, both as a specimen of facts and as a warning to historians. It is this:—"Mrs. Chambers was torn from her carriage at Meerut, ripped up, and her babe's head was cut off before her dimmed eyes." On 3rd April, a letter was printed in the *Times* from "E. E. C.," who states distinctly that Mrs. Chambers was not not "ripped up," but "was shot dead, and did not suffer any pain, torture, or indignity;" and for this fact the evidence of the poor lady's husband, Captain Chambers himself, was produced. On April 5th appeared two letters—one from T. E. H., who shuffled out of Mrs. Chambers's case by the excuse of "a name having inadvertently slipped into print." If it was not Mrs. Chambers, it must have been Mrs. Somebody

else. The writer of the other letter, however, "An Indian Officer," has no scruples; "all that he can say is, no man in India has reason to disbelieve that these mutilations took place." It is enough to remark to the Indian Officer without a name, that such persons as Campbell, Lawrence, Beadon, and Lowe are men in India, and that they have not only no reason to believe, but every reason to disbelieve in these mutilations.

Mrs. Chambers's case—the only case, be it carefully remembered, which had a name—was boldly taken up by Mr. C. Smithers, Mayor of Portsmouth, who declared (*Times*, April 7), that "Mrs. Chambers's son, a lieutenant in the Indian army, had told him the horrible details of his mother's butchery." But this letter was a hoax, and it turned out that Mr. Smithers never wrote it. Yet the forgery had this advantage—that on the 9th of April it brought a letter to the *Times* from E. E., proving not only that Mrs. Chambers, a lady "who had only been married two years," had no "son a lieutenant in the army," but that she never had more than one child, "who died at the early age of seven months," and therefore whose head was not cut off on the 10th of May. T. E. H.'s assertion was thus disposed of. At this point "the Sepoy atrocities" remain a matter not of history, but either of pure fiction, or, at

most, of reasonable conjecture. Not a single case has been proved, though the strictest investigation both in India and in England has been set on foot. Miss Jennings and Mrs. Chambers were named. Both fell, it is true, but without the slightest indignity. The East India Company, and the Oriental Steam Company, and the Indian Relief Committee, are sensitively, anxiously, painfully waiting for a case. A single mutilated person would be overwhelmed with the most substantial sympathy—a provision for life awaits one such sufferer. None is forthcoming. Is it in human nature to resist such warm affection? We are not saying that no mutilations or violations have occurred. We believe that they have occurred, that they must have occurred, that it is almost contrary to the world's experience to suppose that they have not occurred. Still it is most remarkable that the only two cases in which name, time, and place were produced have broken down in every particular. "Mrs. Chambers was ripped up alive, and her child's head was cut off before her eyes;" and Miss Jennings suffered the most fearful dishonor. Yet it turns out that Mrs. Chambers was shot dead on the spot, and that her child died in infancy before the mutiny broke out; whilst Miss Jennings was murdered at a single blow. Such are the conflicting facts of contemporary history.

YANKEE CONCEIT.—The Americans, in Paris (after the battle of Waterloo), wore silver eagles in their round hats, "that they might not be mistaken for Englishmen," an incident not much calculated at that proud moment of their triumph to lessen Englishmen's importance. Talleyrand, who noticed everything and said little, on observing it, remarked dryly in reply to an observation on the subject, that he "had seen many Americans who wished to pass for Englishmen, but had never met an Englishman who wished to pass for an American."

We are glad to say that Government has granted the new charter to the University of London. Our readers, who have already seen the document, will remember that the great point of this reform is the throwing open of Academical honors to every man willing to brave the necessary examinations. This is the best step Education has taken since Lord Brougham and his friends first pronounced against the close guilds of learning—and founded London University as a protest and an experiment. The graduates accept the new arrangement, and peace returns to Gower Street.

—*Athenæum*.

It is stated in an Athens journal that a manuscript copy on parchment of the Gospels in Greek, and bearing the date 480, has recently been found in the garret of a house in that city. It is said to be in good preservation, and has been deposited in the public library of Athens.

GOVERNMENT, we are no less glad to announce, has at last consented to sanction a new degree—a Doctorship of Science. This is truly wise and gracious. London University will very soon be able to grant the new scientific degree,—and we presume that Oxford and Cambridge—especially Cambridge—will in due time follow the good example.—*Athenæum*.

SHORT STORIES.—Sir Walter Scott once stated that he kept a lowland laird waiting for him in the library at Abbotsford, and that when he came in he found the laird deep in a book which Sir Walter perceived to be Johnson's Dictionary. "Well, Mr. —," said Sir Walter, "how do you like your book?" "They're vera pretty stories, Sir Walter," replied the laird, "but they're unco short."

From Chambers's Journal.
NANA SAHIB.

As we have no doubt that many of our readers would be glad to be acquainted with the parentage and other antecedents of the man who bears this blood-stained name, we propose, in the present article, to give a brief sketch of him.

Nana Sahib, Rajah of Bithoor—whose correct name is Sree Munt Dhoondoo Punt—is the eldest son, by adoption, of the late Badjee Rao, ex-Peishwa of the Mahrattas.

For many years previous to his death, Badjee Rao had been a dethroned pensioner of the East India Company. When in the fulness of his power, he had, as a native prince, assisted the East India Company in their war against Tipoo Sahib, the tiger of Seringapatam; and as a reward for his doing so, the Company, after years of strife with him—after negotiations and exactions, and treaties, and violations of these treaties on their part—contrived, in 1817, to get hold of his dominions. After numerous and fierce conflicts, Badjee Rao, at the head of 8000 men, and with an advantageous post, was prepared to do battle for the sovereignty of the Deccan; when Brigadier-general Sir John Malcolm, who commanded the British army, sent a flag of truce to him, with proposals for a surrender.

The proposals made on the part of Sir John Malcolm were, that Badjee Rao, the Peishwa of the Mahrattas, should renounce his sovereignty altogether; that he should come, within twenty-four hours, with his family and a limited number of his adherents and attendants, into the British camp; that they should there be received with honor and respect; that he should be located in the holy city of Benares, or in some other sacred place of Hindostan; that he should have a liberal pension from the East India Company for himself and his family; that his old and attached adherents should be provided for; and that the pension to be settled upon himself and his family should not be less than eight lacs of rupees—that is, £80,000 per annum.

After long and anxious deliberation with his prime minister and other great officers of state, the Peishwa accepted these proposals—went with his family and adherents into the British camp—and Bithoor was afterwards assigned as his residence. The East India Company, with their usual grasping and illiberal spirit of covetousness, were displeased with Sir John Malcolm for his granting these terms. But they, and the governor-general, Lord Hardinge, could not recede from them; and they took care to limit the stipulated allowance to the smallest sum mentioned in

the treaty—namely, eight lacs of rupees, or £80,000 per annum.

We have stated that the pension was to be conferred upon Badjee Rao and his family. Now, before we proceed further, we must mention, that by the Hindoo Shasters, or scriptures, there is a fearful doom awarded against those who die childless; that doom is, the being consigned, after death, to "a place called *Put*, a place of horror, to which the manes of the childless are supposed to go, there to be tormented with hunger and thirst, for want of these oblations of food and libations of water, at prescribed periods, which it is the pious, and indeed indispensable duty of a living son to offer." *

Such are the principles of the Hindoo religion with regard to the want of natural male issue. Now, the same principles, in order to remedy the defect, permit the system of adoption where natural issue fails. It was in accordance with this that Badjee Rao, in his old age, finding himself naturally childless as to male issue, by his will declared Nana Sahib to be his eldest son, heir, and representative.

In his day, Badjee Rao, as chief of the powerful Mahratta nation, had been a great sovereign. He survived his downfall—exercising civil and criminal jurisdiction, on a limited scale, at Bithoor—thirty-five years. On the 28th of January 1851, he died.

No sooner was his death made officially known than Lord Dalhousie tabled a minute at the council board of Calcutta, ruling that the pension, expressly guaranteed to the great Badjee Rao, and his family, should not be continued to the latter. Nana Sahib, Badjee Rao's widows, and the other members of his family, were naturally stricken with grief and terror. They saw themselves reduced to poverty. They had no other pecuniary resources than some trifling sum which Badjee Rao had left behind him.

On the 24th of June 1851, Nana Sahib forwarded a memorial to the lieutenant-governor of the North-west Provinces of India on the subject. In reply, he was told that the pension could not be continued, but that a certain tract of land would be his for life. The commissioner of Bithoor, a public officer of high rank and standing, and who knew the circumstances and claims of the ex-Peishwa's family, forwarded an urgent appeal on their behalf; but, in a letter from the secretary of the governor-general, of date September the 24th, 1851, he received a severe reprimand for so doing. His recommendation was stigmatised as "uncalled for and unwarrantable."

After some further efforts in India, Nana Sahib addressed the Court of Directors, at

* Strange's Elements of Hindoo Law.

Leadenhall Street, in England. His appeal to them was dated the 29th of December 1852.

In the eyes of the East India Company the appeals of native princes of India do not seem to have been matters of much consequence. The Company appear to have considered that it added to their dignity to have the advocates of such princes waiting in their anterooms. Somewhere about December 1853, the Company sent back Nana Sahib's memorial to the government in India, and the result was, that nothing was done.

It would appear that Nana Sahib, with smooth and gentlemanly manners, unites superior abilities; and that to these abilities he adds passions of the strongest and most vin-

dictive nature. His spirit is high, and his vehemence of the most determined character. At the period of the breaking out of the mutiny which has rendered his name infamous, he seems to have become a monomaniac on the subject of what he believed to be his wrongs.

In the preceding sketch, subject, of course, to correction, we have endeavored to state facts, not with a view to advocating any cause, but simply for the purpose of communicating to our readers information as to some of the numerous causes which have led to the dreadful events which have recently occurred in the East.

LABOR AND TRIUMPH: THE LIFE AND TIMES OF HUGH MILLER. By Thomas N. Brown. R. Griffin & Co.

The Life and Times of Hugh Miller is only a peg on which to hang the history of the "Free Church" movement in Scotland. It is chiefly as a geologist, and author of "The Testimony of the Rocks," that Hugh Miller is known south of the Tweed. But in his native country his scientific reputation is eclipsed by his fame as the editor of a paper called "The Witness," which was, and is for all we know, the organ of the large section of Scottish Presbyterians who seceded from the established church on the question of the right of congregations to elect their preacher. The grandson of a buccaneer, and son of a sailor of Cromarty, Hugh Miller, after receiving the somewhat superior education which is generally within the reach of the Scottish peasantry, became a quarryman, in which capacity he acquired the taste for geological studies and the knowledge of the structure of the rocks which ultimately made him so eminent as a geologist. His father was lost at sea whilst he was yet a boy; and at the moment the shipwreck occurred, he saw, or thought he saw, a ghastly vision of a dis severed hand and arm coming towards him. The believers in supernatural apparition may therefore count him as an additional witness to the truth of their belief. But it must be remembered that he destroyed himself while laboring under a fit of insanity which took this very form. Lord Castlereagh related to Sir Walter Scott that a ghastly figure once appeared to him while lying in his bed. These visions may therefore be taken as not unusual symptoms of suicidal mania. Miller's abilities were evidently thrown away in the humble labors of a quarryman, and he was soon selected to manage a country bank which had just been established. Here he labored at the desk for many years, occasionally writing in

newspapers and periodicals. Meanwhile the question of the right of parishes to elect their own preachers was agitating the Scottish public, and on the decision in the House of Lords which decided the legal question in favor of the lay-patrons, Hugh Miller wrote a pamphlet, in the form of a letter to Lord Brougham, which excited much attention, and obtained for him the editorship of "The Witness," which the Free Church was then about to establish. From this time Mr. Brown is so much occupied with the history of the Free Church agitation that he has little to tell about Hugh Miller. We cannot say much in favor of this biography. It is written in the fiercest spirit of Calvinism, and in that intolerably inflated style which, we observe, finds favor north of the Tweed. Mr. Brown does not "homologate" certain statements; and Scott and his school of writers are said to have "looked at their (the Puritans') characters through the tears of Mary Stuart." The discipline of Calvin—who condemned a woman to be burned alive "for having sung immodest songs"—is commended, as "bearing the fairest fruits by the banks of the Leman Lake." Burns is degraded from the rank of one of the "representative men" of Scotland, for having written "The Holy Fair," and Walter Scott, because he was only a "relic of feudalism,"—while Hugh Miller, as a hero, is classed in a triad with Wallace and Knox; and as a writer, above Addison, Goldsmith, Swift, Steele; Richardsan, and Fielding. A whole chapter is devoted to a lecture addressed to Mr. Dickens, on the wickedness of his anti-Sabbatarian principles; and, indeed, throughout the book the incidents of Hugh Miller's life bear a secondary place.

A REAL MAN.—A hospitable man is never ashamed of his dinner when you come to dine with him.

HOME AND REST.

CHILD do not fear;
 We shall reach our home to-night,
 For the sky is clear,
 And the waters bright;
 And the breezes have scarcely strength
 To unfold that little cloud,
 That like a shroud
 Spreads out its fleecy length.
 Then have no fear,
 As we cleave our silver way
 Through the waters clear.
 Fear not, my child!
 Though the waves are white and high,
 And the storm blows wild
 Through the gloomy sky;
 On the edge of the western sea
 See that line of golden light
 Is the haven bright
 Where Home is awaiting thee.
 Where, this peril past,
 We shall rest from our stormy voyage
 In peace at last.
 Be not afraid;
 But give me thy hand, and see
 How the waves have made
 A cradle for thee.
 Night is come, dear, and we shall rest;
 So turn from the angry skies,
 And close thine eyes,
 Lay thy head upon my breast:
 Child, do not weep,
 In the calm, cold, purple depths
 There we shall sleep.

—Household Words.

THE HOUR OF PRAYER.

My God! is any hour so sweet,
 From blush of morn to evening star,
 As that which calls me to thy feet,
 The hour of prayer.
 Blest is that tranquil hour of morn,
 And blest that hour of solemn eve,
 When on the wings of prayer upborne,
 The world I leave.
 For then a day-spring shines on me,
 Brighter than morn's ethereal glow;
 And richer dews descend from thee
 Than earth can know.
 Then is strength by thee renewed;
 Then are my sins by thee forgiven;
 Then doth thou cheer my solitude
 With hope of heaven.
 No words can tell what sweet relief
 There for my every want I find,
 What strength for warfare, balm for grief,
 What peace of mind.
 Hushed is each doubt, gone every fear;
 My spirit seems in heaven to stay;
 And e'en the penitential tear
 Is wiped away.
 Lord! till I reach yon blissful shore
 No privilege so dear shall be
 And thus my inmost soul to pour
 In prayer to thee

BURIED TO-DAY—

FEBRUARY 23, 1858.

BURIED to-day!

When the soft green buds are bursting out,
 And up on the south wind comes the shout
 Of the village boys and girls at play,
 In the mild spring evening gray.

Taken away,

Sturdy of heart and stout of limb,
 From eyes that drew half their light from
 him,
 And put low, low, underneath the clay,
 In his spring—upon this spring-day.

Passes to-day

All the pride of young life begun,
 All the hope of life yet to run;
 Who dares to question when One saith "Nay!"
 Murmur not! Only pray.

Enters to-day

Another body in churchyard sod,
 Another soul on the life in God.
 His Christ was buried, yet lives away—
 Trust Him, and go your way.

—Chambers's Journal.

DEAD RECKONING.

"An account of the ship's course and distance, calculated without the aid of celestial observation."—*Webster's Dictionary*.

LAST night my Soul drove out to sea—
 Down through the Pagan gloom,
 As chartless as Eternity,
 And dangerous as Doom.

By blinding gusts of no-God chased,
 My crazy craft plunged on;
 I crept aloft, in prayers, to find
 The light-house of the Dawn.

No shore, no star, no sail ahead,
 No look-out's saving song—
 Death, and the rest, athwart my bows,
 And all my reckoning wrong!

—National Era.

A SORS HORATIANA!

(Apropos of our present foreign relations.)

"Justum et tenacem propositi virum
 Non civium ardor prava jubentium,
 Non vultus instantis tyranni,
 Mente quatit solida * * *
 * * * * *
 * * * * *

Si fraevis illabatur orbis
 Impavidum ferient ruinæ."

(Or, in *Mr. Punch's* vernacular.)

John Bull, in the right, most composedly brooks
 The French Colonels' proposal for shooting
 or sabring him;
 He cares not for Louis Napoleon's black looks,
 And if the cracked *Univers* takes to belab'ring
 him.
 He but shrugs his shoulders, and "go it," says
 he;
 "It seems to please you, and it doesn't hurt
 me!" —*Punch*.